City of Whittlesea

Stage Two Dry Stone Wall Study:

# Thematic History and Precincts

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*A place for all*

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# Introduction

In September 2018 the City of Whittlesea (CoW) employed David Moloney, an eminent historian and dry stone wall expert, to work with Council officers on a project to identify and provide high-level strategic heritage assessments of dry stone walls found across our municipality. A large number of early walls remain, with a concentration in the northern areas of the City. The walls have cultural heritage and aesthetic values and they contribute to the landscape and overall character and identity of our city and communities. They reflect one of the earliest forms of infrastructure linked to historic period land use practices, as well as the industry and skills of settlers and landowners. In the City of Whittlesea, we also have some specific styles/types of walls built in unique ways as well as dry stone enclosures made for special purposes – the latter may be unique in Victoria.

Dry stone walls are heritage assets from the historic cultural period that are protected under provisions in the Victorian Planning framework and by the *Heritage Act 2017*. Stone walls and stone features built by Aboriginal people in the period before first contact are protected under different legislation.

The overall aim of the research report is to provide statutory, strategic, urban design, parks and open space planners and heritage staff at the CoW, as well as external consultants and community members with a thematic history of dry stone walls in the municipality. Completed in 2020 this contextual history for the walls also presents criteria and identification for several distinct dry stone wall precincts in the municipality and summarises their cultural heritage significance.

This final version of the research report is rich with historical information, maps and images and cultural heritage assessments of Whittlesea's dry stone walls by one of the foremost experts in Australia. We urge you to use it for your own research and as a source of important information about these visible but sometimes little understood historic features which occur across Victoria, Tasmania, South Australia and New South Wales. Their beauty and the agrarian heritage they reflect represent some of our most enduring historic cultural heritage assets.

*When citing this report please use the following information:*

D Moloney 2020 *City of Whittlesea Stage Two Dry Stone Wall Study: Thematic History and Precincts*. City of Whittlesea, Victoria.

## Project Brief and Objectives

**The following deliverables were required by the project brief:**

1. Preparation of a dry stone wall thematic environmental history
2. Identification of types and structure of City of Whittlesea dry stone walls
3. A high level statement of significance for dry stone walls in the City of Whittlesea
4. Identification of dry stone wall precincts in the City of Whittlesea
5. Statements of significance for proposed dry stone wall precincts

## Method

The study is a broad, rather than a detailed, survey of the City of Whittlesea's dry stone wall heritage. Historical research and field work enabled identification of the shape and significance of the Whittlesea dry stone walls.

The City of Whittlesea is set apart from most dry stone wall districts in Victoria by its stony rises geomorphology, and its very early history. Both of these have been studied in order to provide the context for a closer consideration of questions such as construction style, and precincts.

Historical research considered relevant secondary sources, including previous consultants reports, and a representative selection of primary sources, including historical maps, Torrens title application files, the Shires of Darebin and Epping ratebooks, newspapers, and some surveyors field notes. I also received helpful information from property owners, and references to many primary sources from Whittlesea historian Rob Wuchatsch.

Fieldwork was undertaken from the road, and by direct field inspection of properties. A number properties were closed and were unable to be inspected in the time available.

One of the broader issues requiring attention was comparison of the cultivation paddocks which characterised the Merri–Darebin Plains, with similar landscape-shaped dry stone walls elsewhere in Victoria. Raelene Marshall, with the assistance of Laurie Atkins, was engaged to identify any comparable intricate complexes of walls that appear on the early twentieth century Defence Ordnance maps, and to systematically survey satellite images of Victoria's other major areas of stony rises for dry stone walls that might be enclosed or semi-enclosed cultivation paddocks or similarly landscape-derived forms; inquiries also uncovered international information regarding enclosed and semi-enclosed cultivation paddocks.

## Key Findings

Some of the main findings of this report relate firstly to the very distinctive nature of dry stone walls in the City of Whittlesea. Some relate to the particular history of the area and its people.

The particular stony rises landscape of the Merri–Darebin Plains produced dry stone walls with two significant characteristics:

1. The complexity of walled and partly-walled enclosures is significant at the state level. The plans of internal dry stone walls characteristically follow the shape of the stony rises. This is especially the case for cultivation paddocks, which were widespread in view of the suitability of much of the soil in the district for cultivation, and the dominance of the dairy industry in the area, which necessitated separation of crops and stock. The consequent organic, or semi-regularised stepped plans of walls in the district, are incomparably more historically and visually interesting than the rectilinear, survey-grid, form of dry stone walls across the great majority of the Victorian landscape.

2. The construction of the walls in the area was greatly influenced by the stony rises, which provided large, and often flat, 'platey' stones, as a result of horizontal tension fractures and then weathering of these outcrops. In defiance of walling convention, these oversize stones were often set on edge, and laid out along the wall ("traced"), providing a characteristically cyclopean, rubble face to local walls, and a greater than usual base-width and mass. Many of these walls, although built by farmers, have survived intact where they pass over the firm foundations of stony rises; other walls, some apparently professionally built, use a more conventional range of stones and method of construction.

Other notable features of the area include:

3. The Merri Creek side of the Merri-Darebin Plains were the first 'country' land to be sold in Port Phillip, in 1838. The anomalous land policy of the day resulted in much of this area being held by two absentee landlords. The demand for food in the gold-rush resulted in smaller and more accessible farming allotments being sold by the Crown in 1853, and it was on these farming lands that most of the City of Whittlesea's dry stone walls were built.

4. German settlers, either directly or indirectly from Westgarthtown, purchased many of these 1853 allotments, subdividing some into even smaller parcels, and contributing to the intensity of dry stone walling. The Germans, together with the Irish and English immigrants in the Epping-Wollert district, and aided by the economic geography of the area which enabled fresh-milk production, built the distinctive intensive pattern of dry stone walls which characterises the Whittlesea area, and which distinguishes it within Victoria. The German community also built original types of dry stone walls, such as retaining walls for streams, and diversion channels.

## Recommendations for Further Work

*Planning*

- Determine what additional data might be required, in terms of history, and wall documentation, to satisfy any request that might come from Heritage Victoria or Planning Panels Victoria.
- Confirm identification and mapping of potential precincts (especially the Campbell Precinct) and associated Statements of Significance.
- Identify the most significant walls at 80 Harvest Home Road, and consider options for their preservation.
- Ongoing review of mapping of dry stone walls, including but not limited to:
    - Extension of the map to the southern areas of the municipality.
    - Investigate, with a view to inclusion, walls:
        - east of Vilcins Views - Stonebridge Rise;
        - north of Juggal Close;
        - a half-wall perpendicular to O'Herns Road, west of Vearings Road, north side;
        - west side of cultivation paddock north of Hendon Park (Vearings Road);
        - Vearings Road, west side, whole length;
        - north-south Campbell boundary wall east of Epping Fruit and Vegetable Market (and other walls on 325D Cooper Street, Epping);
        - Former Wollert township wall halfway between Cooper and O'Herns, east of Merri Creek;
        - Merri Creek Parklands: wall around base of a stony rise;
        - near farmstead at 521 Craigieburn Road;
        - Walls on 325D Cooper Street (south-west corner Edgars Road), Epping
        - Dry stone walls identified in Context 'City of Whittlesea Heritage Study, Historical Archaeology Report', 2009, at:
            - 10 Gordons Road, South Morang
            - 1005 Plenty Highway, South Morang
            - 15 Craigieburn Road, Wollert
            - 895, 1025 Donnybrook Road, Donnybrook
            - 295-315 & 337-413 Cooper Street, Epping
            - 471 Edgars Street, Epping
        - Other road walls, and sparse areas of walls mainly north of Donnybrook Road.

- Assessment of heritage significance of these walls, and others outside the precincts proposed in this report, notably:
  - Walls on the former *Summerhill* property;
  - 260 Craigieburn Road East;
  - 1220 Donnybrook Road;
  - 210 Vearings Road.

*Further Work: Field Survey, and Historical and Archaeological Research*

- Further investigation of the enclosed and semi-enclosed paddocks on the Merri Creek near O'Herns Road:

  - It is possible that the fabric of the site dates to successive periods, from the 1840s. If the former dwellings date to this first farming era in Port Phillip, they are of very high historical significance. If they, or the walls, pre-date the early 1860s when this part of the City of Whittlesea was by far the most important district of wheat cultivation in Port Phillip, they are also of high historical significance.

  - Archaeological investigation, including:
    - The layout/plan of the walls, in relation to 1840 boundaries, in relation to stony rises and outcrops, and in relation to their possible use;
    - construction of walls, including changes or differences in type of stone and construction technique.

  - Historical research, including:
    - research of the Campbell archives, or consultation with the family historian Mr CET Newman;
    - consultation with families which are known to have had an association with the properties, including the Vearing family, the Ziebell family, and the Taggert family. And if possible, the families of the known first farmers, the Alston, McCrae, and Stewart families. Approaches to genealogical societies, and the Whittlesea historical society, might assist in this regard;
    - close research of Council ratebooks, and Torrens Application files, for lessees, neighbours, and possible contracts, including of nearby properties;
    - newspaper (Trove) research regarding places, people known to have been associated with the sites, and newsworthy incidents or events nearby;
    - research of all historical aerial photography;
    - examination of the archives of the Whittlesea historical society.

  - Further research of cultivation paddock dry stone walls, including:
    - comparisons and differences between the layout, age, and use of cultivation paddock walls in Whittlesea.
    - comparable dry stone wall enclosed and semi-enclosed cultivation paddocks, and landscape-shaped dry stone walls in Victoria.

- Further research of 'cyclopean' dry stone walls, including:
  - identification of any associations of this construction style with any particular wall-types within Whittlesea (eg internal walls, walls near stony rises, boundary walls); or with any particular groups of builders (eg, non-professionals / farmers, or a particular ethnic group);
  - comparable dry stone walls elsewhere in Victoria.

- Further detailed research of the construction materials and techniques of Merri–Darebin Plains dry stone walls, including:
  - use of stones on edge
  - evidence of different styles, and different time periods
  - evidence of different (primitive) construction style
  - identification of similar walls in other parts of Victoria.

- Half-walls: investigation of: width at base; double or single wall construction; placement, uniformity and apparent age of posts; uniformity of copestones (including of walls on the boundary of the former 90C Harvest Home Road and 80 Harvest Home Road, and 25 Vearings Road).
- Survey of surviving 'farmstead' walls, especially milking yards; also of horse yards, bull pens and enclosed orchards or kitchen gardens.

# Statement of Significance:

## The City of Whittlesea 'Merri–Darebin Plains' Dry Stone Walls

- Dry stone walls are a powerful expression of human interaction with the volcanic landscape. They express the natural history of the area, and the cultural history of its human modification.

- The Merri–Darebin Plains volcanic landscape constitutes the eastern extremity of Victoria's 'Newer Volcanics' province, which stretches across the Western District to the South Australian border. This province is internationally notable in terms of its size; it also includes the Budj Bim Cultural Landscape World Heritage Site.

- In the northern sector the precinct's volcanic origins are evident in the commanding scoria cones of Bald Hill and Mt Fraser; across most of the precinct they are conspicuous in the stony rises. This is the only substantial landscape of stony rises east of Mt Mercer; it has conferred unique qualities of layout, structure, natural context and integrity to the Merri–Darebin Plains dry stone walls, as well as scientific and educational potential.

- Partition of the land with dry stone walls represents and highlights one of the Europeans' most profound marks on the continent; today the walls are amongst the very oldest European structures in Whittlesea. Road and property boundary walls are the most widespread type of wall. In addition the Merri–Darebin Plains feature some distinctive and rare types of walls, including cultivation paddocks, and channel diversion walls.

- The main types of dry stone walls in the Whittlesea study area are: boundary walls, with those on the road making the most conspicuous contribution to the consciousness of dry stone walls in the district; internal paddock walls, including the distinctive cultivation paddock walls, which in this area are usually shaped by stony rises; and walls related to farmsteads, including dairy yards, horse yards, bull pens and orchards.

- In 1838 the district between the Merri Creek and Plenty River, which included the rich 'Merri Creek soil', became the first 'country' land alienated for farming in Port Phillip. However the anomalous Wakefieldian land policy of that time resulted in nearly all of the land being sold to speculators or aspiring large pastoralists; the southern part remained in the hands of an absentee landlord, and was consequently unavailable for small freehold farming until the early twentieth century. Although popularly regarded as 'undeveloped', in the late nineteenth century these vast tracts were leased to some of the largest commercial providers of fresh milk in Victoria. Two types of dry stone walls preserve the legacy of this short but influential historical period: remaining sections of the Campbellfield Estate boundary walls which likely date to the 1850s; and some early farm dry stone walls, including cultivation paddock walls, which if they date to the 1840s, would be unique evidence of early farming in Port Philip.

- The remaining dry stone walls around and within the Westgarthtown Lutheran church and cemetery reserve are integral to the significance of this village, and its association with Melbourne politician, merchant, amateur geologist and memorialist William Westgarth and the German settlers he brought to Port Phillip. From 1850 extensive farm walls were also built, of which only a tiny remnant remains.

- Westgarthtown became the cradle of the extensive German settlement on the Merri–Darebin Plains, particularly the Epping-Wollert area, and its association with dairying. Pura milk was started by Albert Siebel, of a Westgarthtown family to market the district's milk, and is now one of Australia's largest milk brands. The German community made a distinctive contribution to dry stone walling building of this area.

- That this is a major precinct of dry stone walls is the consequence of the dominance of a single industry, dairying, on the Merri–Darebin Plains. While the district included some of the largest nineteenth century commercial dairy enterprises in Victoria, its proximity to the profitable Melbourne fresh milk market meant that small, intensively developed family farms became viable after land was sold in small allotments in 1853. Farming complexes, in particular milking-yard dry stone walls, are thus a motif of the province. The nexus of small dairying with a remarkable landscape produced some exceptional and historically significant walls, primarily those which followed the contours of stony rises, forming cultivation paddocks. These walls maintained and extended this 1840s practise on the Merri–Darebin Plains, maximising the land available both for cropping on the rich black alluvium, and grazing on the mineral-rich 'sweet' grasses of the stony rises. As stony outcrops or knolls appear to have been preponderant on the majority of properties, crops were enclosed in cultivation paddocks, and so characteristically internal walls on the Merri–Darebin farms were constructed to keep stock out rather than in.

- The 1840s practice of dry stone wall enclosed or semi-enclosed cultivation paddocks also continued in the Merri–Darebin Plains, featuring walls built on or at the base of solid stony rises, and lighter fences built on softer ground or the wetter patches which were common in this landscape. A common variation in the district was to regularise the organic forms of landscape-shaped cultivation paddocks into neat, sometimes stepped, orthogonal plans. Another was to build a wall along the ridge of a stone rise, apparently because it provided a convenient foundation for a general paddock wall. As the overwhelming majority of property boundary walls, and consequently internal paddock walls in Victoria are linear in conformity with the government survey grid, the asymmetrical, and sometimes freeform, walls of Merri-Darebin Plains cultivation and other paddock walls stand out aesthetically, are rare in Victoria, and unique in terms of their intensity and extent. They are incomparably more historically and visually interesting than the vast majority of dry stone walls in Victoria.

- Intensively built complexes of dry stone walls close to farmsteads were also an intrinsic part of the small farming landscape. As well as milking yards, they included horse (or stallion) yards, and bull pens. While there are others, superb surviving examples include *Langton Lodge* (milking yard) and *Fenwick Stud* (horse yard). Although apparently once common, there are no known extant examples of a bull pen. A walled enclosure next to the former Timms house on Bindts Road appears to have been an orchard, and perhaps a house garden. There is a fine dry stone wall entrance, planted with mature pine trees, at the *Pine Grove* farm on Lehmanns Road.

- Another distinct and exceptional consequence of the nexus of small farming and stony rises on the Merri–Darebin Plains were water-related walls. At Westgarthtown stream channel walls controlled stock access to water; none of these survive. Elsewhere some diversion walls were built by German settlers to drain the wet land that was symptomatic of stony rise landscapes; an example on the former Schultz property on Bridge Inn Road is outstanding. Similar stream diversion walls on farm properties (ie non-Aboriginal, non-mining and non-pastoral walls) are presently unrecorded elsewhere in Victoria.

- The stony rises landscape also resulted in a distinctive construction style for Merri–Darebin Plains walls, characterised by a liberal use of oversize or massive stones gathered from the surfaces or grubbed from the outcrops of stony rises. The stony rises outcrops fractured and eroded horizontally, providing flat 'platey' stone. In denial of dry stone wall convention, most of these stones were placed on edge, necessitating a wider wall base and greater mass than usual, and producing a cyclopean rubble wall face; some boulders are so large as to necessitate 'single wall' construction. While this form of construction is not exceptional in Victoria, such extensive use elsewhere is not known at this stage; it is exceedingly rare in the outer Melbourne dry stone wall districts. Overall structural orthodoxy and generally conventional proportions were however preserved by retention of conventional 'double-wall' construction, and cope stones to tie the walls.

- This distinctive structural aesthetic is enhanced by the unusual (relative to walls on Melbourne fringes) number of walls with substantially intact segments as a result of having been built across solid stony rises.

- The informal aesthetic quality of the dry stone walls is vernacular, reflecting the texture, patina, colour and form of the underlying geology and landscape, and the inherited traditions and craftsmanship used to assemble them.

- In some areas the formal and informal aesthetics of the walls both complement and are enhanced by adjacent landscapes of stony rises and open red gum woodland, of exceptional visual quality; other remnant or significant native flora and fauna also survive on the stony rises in places.

- Although many of the cultivation paddocks have now been lost, the substantial number that remain appear to constitute a unique or at least rare precinct in Victoria, which is significant in demonstrating the distinct topography and singular usage of the area, and sufficient in type, intensity and extent to be of heritage significance at the state level.

- The walls' special aesthetic qualities as a result of their associations with stony rises, and also the consequent irregular layout of many; the possible very early dates of some, and associations with early Port Phillip and the short Wakefieldian period of government land policy; associations with the later nineteenth century history of the fresh milk industry; the rare, possibly unique stream diversion walls; and the distinctive characteristic construction style of Merri–Darebin Plains dry stone walls all provide potential to yield information that will contribute to an understanding of Victoria's cultural heritage. The walls have outstanding potential for both research and education regarding farming practices and life on the Merri–Darebin Plains stony rises in the nineteenth century.

# Chapter One

## Geomorphology: The Volcanic Landscape

### Whittlesea's Volcanic Landscape

The City of Whittlesea volcanic landscape constitutes the eastern extremity of Victoria's 'Newer Volcanics' province, which stretches from Whittlesea west across the Western District to the South Australian border. The size of this province is significant at the international level. The Gunditjmara people's dry-stone aquaculture system and stone dwellings have recently been inscribed by UNESCO as the 'Budj Bim Cultural Landscape' World Heritage Site.[1]

Within Whittlesea this area is primarily situated between the Merri Creek and the Darebin Creeks, but also extends around earlier non-volcanic uplands, the Quarry Hills and the Eden–Whittlesea Hills, to Barbers Creek and towards the Plenty River.

These 'Merri–Darebin Plains' were created from lava eruptions from some dozen vents in the area. The two most prominent eruption points are the classically shaped scoria cones of Mt Fraser (120 metres high), about 5 kilometres south of Wallan and just east of the Hume Freeway, and the composite lava and scoria volcano, Bald Hill, at Beveridge, both of which command the western skyline in the north part of the region. With very clearly defined bases, they are very distinct visual features in the wide open surrounding landscape.

A third major eruption point is Hayes Hill (also known locally as 'Little Bald Hill'), 'an inconspicuous 30 metre scoria dome on a broad lava field', situated some 5 kilometres east of Donnybrook (north of Donnybrook Road halfway between the railway and Epping Road).[2] This is thought to have been the main source of the lava which flowed 50-60 kilometres down the ancestral valleys of the present Merri Creek and Darebin Creek to the Yarra River delta (the former 'Falls' on the Yarra River near Queen's Bridge) some 800,000 years ago.

The lava eruptions reshaped the drainage of the area. The ancestral drainage systems from the north were blocked by lava flows, creating swampy alluvial plains east of which were known as Hernes Swamp and Camoola Swamp, but which have since been drained. The landscape of this northern part has been described as 'a series of subdued stony rises with a local relief of 5-8 metres.[3]

The Merri Creek emerged south-westwards from the swamp and continued south near the western boundary of the stony rises, to the lava plain that had flowed south-west from Bald Hill. The Darebin Creek began a little south, around Hayes Hill, and wended its way among the depressions and ridges of the stony rises in a south-easterly direction, where it was redirected south by the Quarry Hills. A number of smaller streams, most notable Edgars Creek, drain the area between these main waterways.

### Stony Rises: the Feature of Whittlesea's Volcanic Landscape

In 1869 the Geological Survey of Victoria provided the following description of the area:

> 'The basalt of this neighbourhood (parishes of Kalkallo and Wollert) in places forms a series of rocky eminences of small dimensions rising above the level of the plain; the interspaces in many cases, where covered with much soil, forming "crabhole" ground, locally termed "glue pots". The creeks are shallow, with here and there a little alluvial soil in their banks … The whole of the plains are generally well grassed and timbered.'[4]

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[1] https://whc.unesco.org/en/list/1577/
[2] Birch, WD, *Volcanoes in Victoria*, Royal Society of Victoria, 1994, p.33; Victorian Resources Online: 'Port Phillip and Westernport: Bald Hill'
[3] 'Merri Creek and Environs Strategy, 2009-2014', Merri Creek Management Committee, 2009, p.43
[4] Geological Survey of Victoria, 1869, 'Kalkallo, Yan Yean, Wollert, Morang'

The stony rises bestowed two very distinctive features on Whittlesea's dry stone walls: the visually striking irregular plans of many walls in the district; and the oversize stones used in construction.

The bewildering broken surface of the landscape between Colac and Camperdown (around Pomborneit) in Victoria's Western District became famous early in the history of European settlement, and soon became known as 'The Stony Rises'. Initially it had stood in the way of the most direct route between Melbourne and Portland, giving rise to the 'Portland Road' passing to the north along what is now the Hamilton Highway rather than the present Princes Highway. Later its exotic natural features attracted attention, and more recently it has become known as Australia's most prepossessing precinct of dry stone walls. It coined the name 'stony rises' for the other areas of blistered stony outcrops that feature around many of the more recent of the c.400 eruption points in Victoria's 'Newer Volcanics' region.

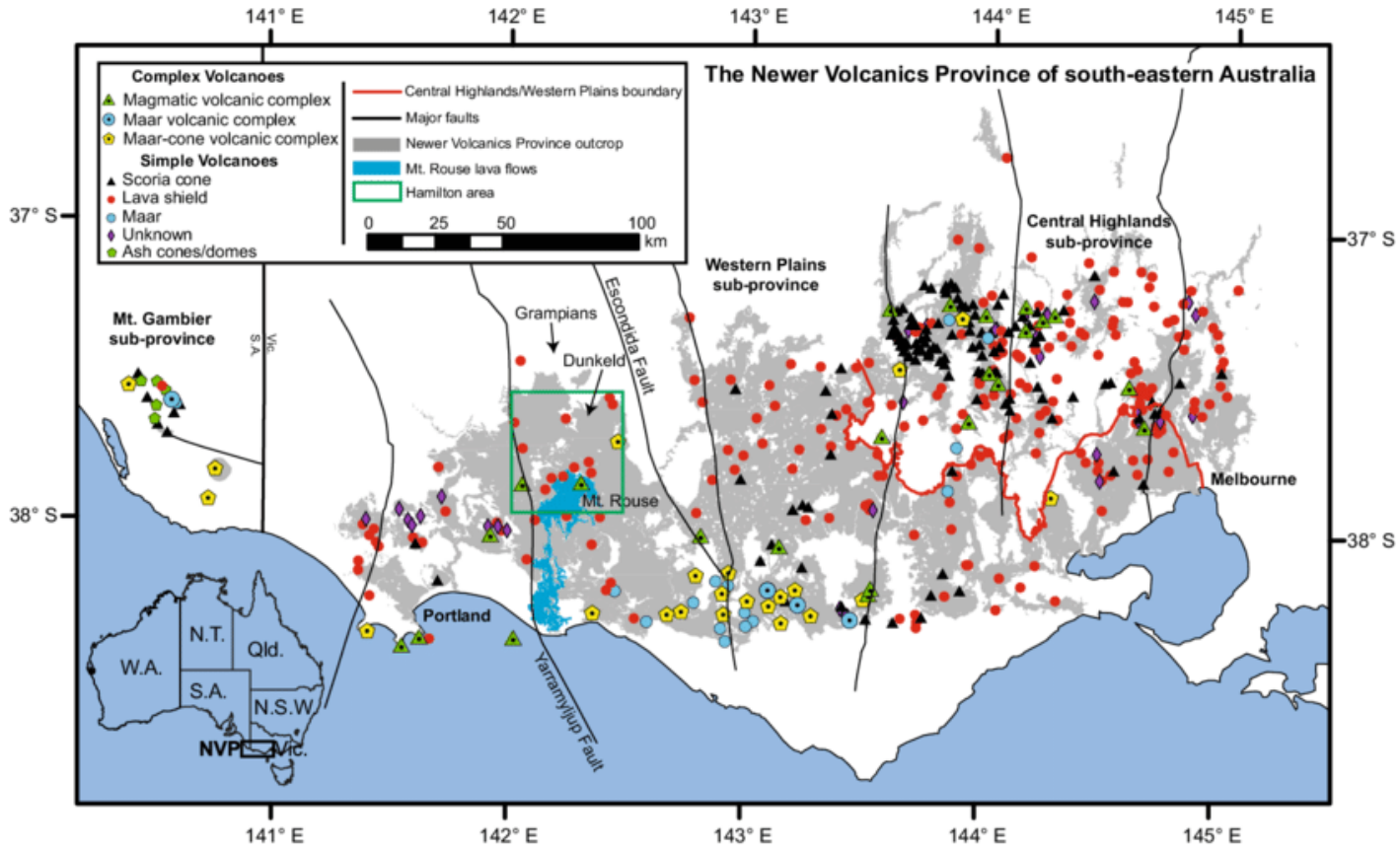


*Image 1: The Newer Volcanics Province of southeastern Australia, showing eruption centres, lava flow cover and major faults. Modified after Boyce (2013) with additional eruption centres.[5] The easternmost void in the lava field appears to be Quarry Hill, east of Wollert. For stony rises, see Image 164 (p.202).*

[5] Julie Ann Boyce, Ian A Nicholls, Reid R Keyes, PC Harman, 'Variation in parental magmas of Mt Rouse, a complex polymagmatic monogenetic volcano in the basaltic intraplate Newer Volcanics Province, southeast Australia', in *Contributions to Mineralogy and Petrology* 169 (11), January 2015

The present forms of Bald Hill and Mt Fraser date from different eruption periods, some of lava, and later more explosive eruptions of 'frothy' lava called scoria or cinders, or lapilli, which created 'scoria cones'.[6] So although visually impressive in the plains landscape, the cones were more recent features of the volcanic landscape, whose main eruptions c.800,000 years ago produced the relatively vesicular lava evident now on the stony rises of the area.

The Merri–Darebin lava plains are variously said to flow 50 or 60 kilometres to the Yarra River estuary. This is not minor, comparing with the largest Western District lava flow of 60 kilometres from Mt Rouse (said to be the longest in Victoria), 50 kilometres from Mt Eccles, and 20 kilometres from Mt Napier.[7]

The extent of stony rises across this so-called 'Burnley Basalt Flow' volcanic lava flow is unknown, but constituted at least the City of Whittlesea portion, called the 'Merri–Darebin Plains'.[8] Yet despite its proximity to the metropolis, and its considerable extent, the 'young stony rises around Epping'[9] are one of Victoria's more obscure stony rises provinces. Their isolation from the Western District probably contributes to that; apart from some typically very low patches in the City of Wyndham, the next closest stony rises to Melbourne appears to be small areas near Mt Buninyong and Mt Mercer south of Ballarat.[10]

On the Mt Fraser flow east of Merri Creek, in the Beveridge Donnybrook area, 'crescentic tumuli' (lava blisters) are well developed, and 'unusual, broad flat-topped stony rises lie above the general level of the basalt'.[11]

The City of Whittlesea is in the process of mapping this 'Rocky Knoll' landscape. As well as being of geological significance, it is part of the history of the indigenous people of the area, and host to significant or remnant native flora and fauna.

## The Creation and Features of Stony Rises

Stony rises are features of 'younger' lava flows, which on Victoria's western plains characteristically have sharp boundaries and reliefs, and 'irregular stony surfaces, thin soils and woodland cover'. While their origin is not certain, Joyce's explanation appears to be widely accepted:

> 'These young flows have a shallow, brown to black clay soil through which boulders protrude on the slopes and in depressions. Basalt outcrops occur on the rises. The stony rise flows from extensive areas around individual volcanoes (eg, Mt Eccles, Mt Napier, Mt Rouse), spreading radially as a series of lobes which overlap to build up a sheet of lava. The outbreak of tongues of liquid lava from inside the lobes and the collapse of the original surface over the evacuated area formed the irregular hummocks, ridges and sinuous or basin-like depressions of the stony rises.'[12]

Rosengren provides another perspective of western volcanic plains stony rises:

> 'The volcanic plains is therefore built up of thin lava flow units just one or two metres thick and sometimes just 20 or 30 centimetres. Overlapping of flows from a single eruption point have built to thicknesses over 60 metres in places. New lava surfaces were hard and rough and cooling, cracking and convergence of lava flows in places produced complex, fractured surfaces called stony rises. This lava topography is well-preserved on the Tyrendarra flow from Mount Eccles. Stony rises occur where several lava flows intersect, or where part of a flow collapses and sags, resulting in a complex topography of ridges and depressions with many swamps and lakes.'[13]

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[6] Birch, *op cit*, pp.16, 20
[7] Webb, John A, *Geological History of Victoria*, 1991, p.553 (https://www.researchgate.net/publication/303049011)
[8] *ibid*, p.560
[9] *ibid,* p.560
[10] As such, the focus of both the scientific and popular literature regarding stony rises is Victoria's Western District, eg Ben Haywood, 'Volcanoes in Victoria', *The Age*, 11th August 2008
[11] McAndrew, John, Marsden, AH (eds), *Regional Guide to Victorian Geology*, School of Geology, Melbourne University, 1968 (second edition), p.35
[12] Joyce, Bernard, 'The young volcanic regions of southeastern Australia: early studies, physical volcanology, and eruption risk', *Proceedings of the Royal Society of Victoria*, 116 (1), 2004, p.1-13
[13] Rosengren, Neville, 'Geology and Geomorphology of Victoria's Grassland Regions', La Trobe University, p.8 (https://www.academia.edu/19444222/Geology_and_geomorphology_of_Victoria_s_grassland_regions)

Walter Hanks however describes the Merri–Darebin stony rises not as the result of evacuating and collapsing, but rather of bulging lava flows in the form of 'pressure ridges', 'transverse concentric ridges', and 'tumuli'. Other 'high ridges' and 'abrupt edges' were formed by intersecting lava flows, for example of the Mt Fraser beside and over western parts of the earlier Hayes Hill flow.[14]

Hayes Hill, situated just north of Donnybrook Road about 3 kilometres east of the railway line, was the main source of the Merri–Darebin Plains and the lava flow that reached Melbourne. Hanks considers that this broad, southward lava flow was extruded in a single period, probably over about 8 months.

Pressure ridges can be formed when advancing lava underneath a flow pushes up against the hardening outer crust, tilting it outward. Or else, stationary internal plastic lava, expanding as it cools ('inflation'), forms a raised mound of hardened lava rock, usually in the form of a long narrow ridge. Tension cracks commonly run along the elongated axes, and edges, of these hardened ridges (or tumuli).

For example, writes Hanks, a prominent mound on Donnybrook Road south-west of Hayes Hill is a pressure ridge associated with an eastwards 'short extension' from the Mt Fraser flow down the western valley (Merri Creek). The mound was created by the build-up of internal molten lava near the cooling and hardening surface of the eastern toe or terminus of this eastern lava break-out.

***Image 2:*** *The Donnybrook Road 'pressure' mound derives from an easterly breakout of lava from the main southward flow from Mt Fraser down the Merri Creek drainage line. Hayes Hill can be seen behind it. (Google Street View, 2019)*

[14] Hanks, Walter, 'Newer Volcanic Vents and Lava Fields between Wallan and Yuroke, Victoria', *Proceedings of the Royal Society of Victoria*, Vol.67, Pt.1, 1955, pp.1-16

The later thick and sluggish Mt Fraser flow down the west side of the Hayes Hill flow developed numerous crescentic ridges, created by obstacles or variations in the flow in different parts. Some of these developed into tumuli, created as blocked liquid lava inside a flow expanded as it cooled, bulging through the outer skin of the lava flow.

Significantly for the construction of dry stone walls on these Merri–Darebin Plains, Hanks observes that while the Hayes Hill flow was characterised by 'a fair amount of soil', its 'ridges are covered with medium sized boulders, most of which are very vesicular.'[15]

This youthful drainage system is the result of repeated changes in volcanic activity. The basalt from the first lava flow, from Green Hill, north of Mt Fraser, provided a 49 metre depth of basalt at Wollert; the deepest part continued through Wollert and Epping. The eruption of Mt Ridley forced the drainage (the present Merri Creek) east. The eruption of Bald Hill discharged a large quantity of vesicular basalt, whose eastern edge probably created the line of 'Lime Creek' (today's Curly Sedge Creek). The eruption of Hayes Hill covered all the country to its south and east, and forced the drainage west. The eruption of Mt Fraser then filled this western valley, again reshaping the drainage into what is essentially the course of today's Merri Creek. Darebin Creek made its way southward 'as a mere gutter on basalt', and settled between the eastern edge of the Hayes Hill lava flow at Quarry Hill.

In addition to cutting across earlier drainage systems, creating marshes and lakes, the local geomorphology created alluvium and water ponding between the stony rises. As can be seen in satellite views across western Victoria, most settled areas of stony rises have been drained by man-made channels.

Farmers on the Merri–Darebin Plains also drained the stony rises land. Two notable examples are at the Findon Creek West branch near Bodycoats Road and Boundary Road (drained by Thomas Bodycoat and perhaps others), and the Findon Creek East Branch and an unnamed watercourse east of this, which were drained with the help of retaining dry stone walls as they crossed Schultz farms.

While stony rises surface drainage was typically pooled and poor, the rises themselves are very permeable, as explained in a study of western Victoria hydrology:

> 'The stony rises are less weathered and more fractured than the plains basalt and this, combined with the limited surface drainage, allows considerable volumes of good quality groundwater to be generated. Springs draining the Pomborneit stony rises have been estimated to outflow 7500 megalitres per year into Lake Corangamite. Interbedded scoria and basalts can have substantial yields of good quality water.'[16]

Hanks also notes poor drainage as being characteristic of stony rises. He observes that 'the present drainage system' of the Merri–Darebin Plains 'is immature, much of the water sinking into the lava and flowing as ground water.'[17]

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[15] *ibid*, p.10
[16] Nolan, J, Stanley, D, Wijesekera, N, Mann, B, 'Basalt Plains Hydrogeological Investigations, Progress Report No.1', Rural Water Commission of Victoria, January 1990, p.19
[17] Hanks, *op cit*, p.1

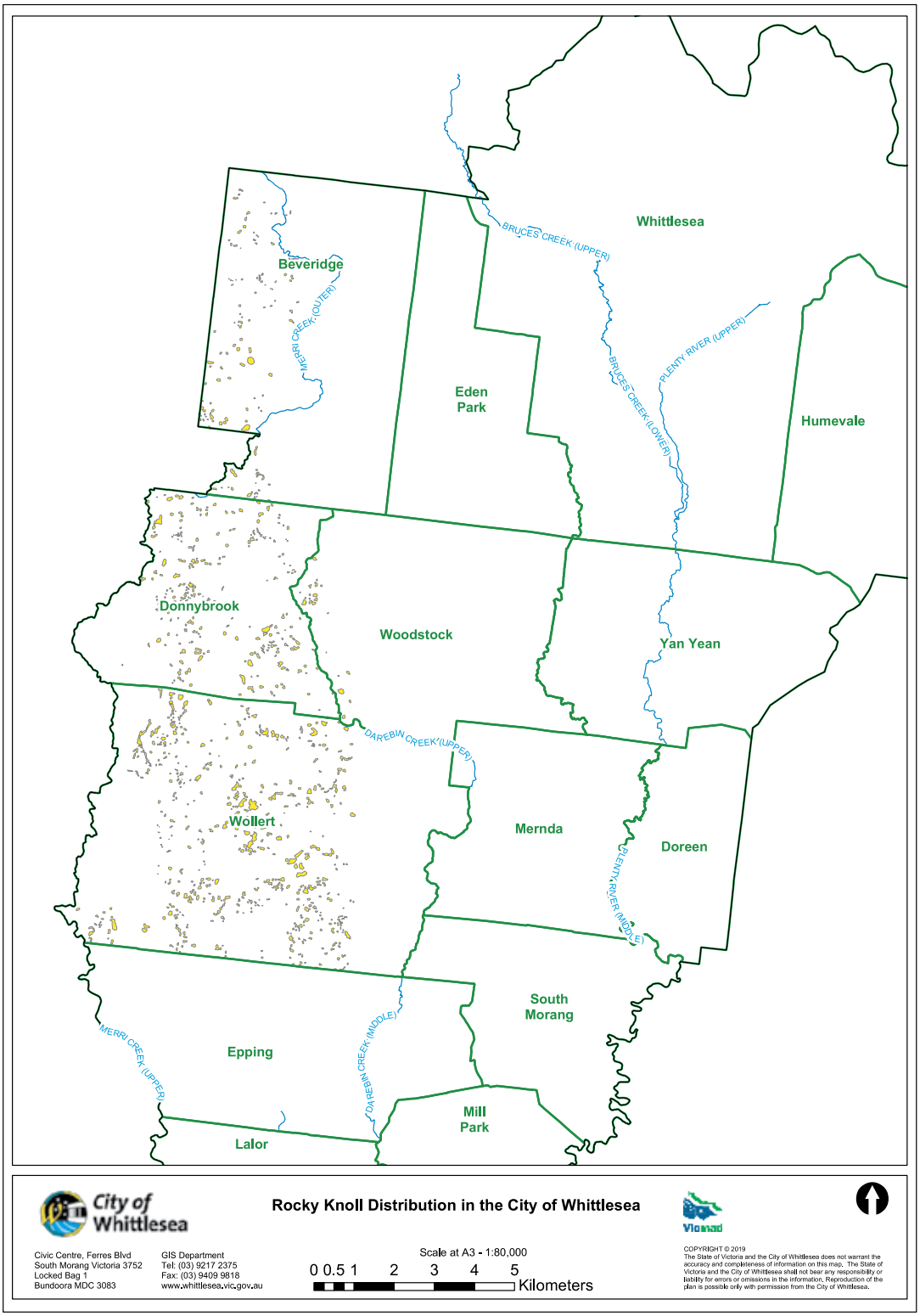


*Image 3: Rocky Knoll Distribution Map of the western parts of the City of Whittlesea Merri–Darebin Plains area (as at September 2019).*

The plentiful springs in the Merri–Darebin Plains stony rises country were known and used by farmers from the first to the most recent.[18] As early as 1840 advertisements for the 2400 hectare Argyle Estate, which comprised most of the southern half of the Whittlesea volcanics area, noted the 'beautiful springs dispersed over its face'.[19] By 1848 a 'spring' was marked on Crown Allotment 25, Parish of Keelbundora; in 1850 the Westgarthtown settlers were careful to obtain legal access to it.[20] Springs on roads were likely used by bullock teams. The original name of Wollert was 'Pikes Water Hole', named after the squatter-in-possession and a spring near the Wollert cross-roads. Kalkallo was first known as 'Rocky Water Holes'.[21] In 1857 a 'water hole' (spring) was marked beside Epping Road, just south of the stony rise at Summerhill Road.[22] An 1868 map shows two waterholes in the middle of the plains, between Epping Road and the Merri Creek on Harvest Home Road and Craigieburn Road, and another on Epping Road south of Woodstock. By this time the waterhole near Summerhill Road is marked as a well.[23]

Joyce describes the morphology of the (young) Stony Rise lava flows of less than 1 million years old:

> 'well-preserved flow features including a varying surface relief of 10 metres or more (locally known as stony rises) and little or no soil cover. The young flows are associated with lakes and swamps, both at their margins due to disrupted drainage, and also on their irregular surfaces.'[24]

The Merri–Darebin volcanic plain, of 800,000 years, fits some of these diagnostic features, for example the former Hernes and Camoola swamps, and some smaller poorly drained marshy areas. However the Merri–Darebin Plain also has characteristics of the older 'intermediate' age volcanic landforms of 1-3 million years age, including a considerably lower surface relief, several metres of black swelling clay soil, relatively stone-free plains, and 'well-developed gilgai'. It also has some natural drainage lines: the Merri, Darebin, Edgars and Findons creeks.

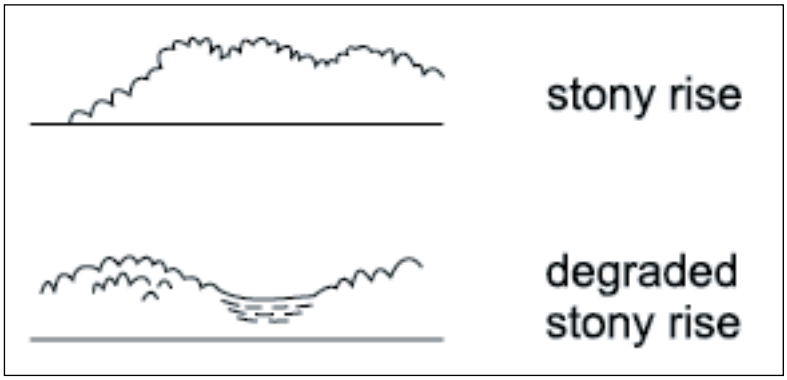


***Image 4:*** *Cross section, stony rise landform, less than 200,000 years old (top) and 0.2 to 1 million years old (bottom). (Part of figure 2, p.2, EB Joyce, 2003) 'As the stony rise landscapes developed through geological time, they evolved into plains with poorly developed drainage.'*[25]

[16] Tom Love, of 275 O'Herns Road, personal conversation, 14th March 2007; Andrew Long, another local farmer told of the O'Hern's farm, which had three 'wells' along the nearby creek/ gully, tapping the local aquifer. (Sonia Jennings, Mary Sheehan, 'Historical Analysis & Assessment: Urban Land Authority Site, Epping', 14th August 2000, p.16)
[19] *Port Phillip Gazette*, 19th August 1840
[20] PROV Historical Plan: Sydney K7, 1848
[21] Payne, JW, *The Plenty: A Centenary History of Whittlesea Shire*, Lowden, Kilmore, 1975, pp.6, 14, 102-103
[22] PROV Historical Plan: New Roads 122, 1857
[23] Geological Survey of Victoria, 1869, 'Kalkallo, Yan Yean, Wollert, Morang'
[24] EB Joyce, 'Western Volcanic Plains, Victoria', CRC LEME, School of Earth Science, University of Melbourne, 2003, p.2
[25] Victorian Resources Online: 6.1.2 'Stony Rises (Mt Eccles, Pomborneit, Mt Rouse)'

Joyce observed that 'the younger soils on the volcanic stony rises lava flows are full of rounded or angular stone' which have been collected to clear the paddocks, and often used to build dry stone walls.[26] The National Trust also notes that the Pomborneit Stony Rises are characterised by angular or sometimes 'blocky' volcanic rock scattered across the ground'.[27]

The Merri–Darebin stony rises have been described as being 'unusual' in their broad flat-tops.[28] Their surfaces would appear to be more rounded and weathered than the very rough and irregular Pomborneit 'Stony Rises'. Most of the Pomborneit – Derrinallum walls are constructed with stone that is smaller, more consistent in its range of sizes (both angular and squared 'blocky' shapes), more regularly coursed, and more vesicular than the typical wall on the Merri-Darebin stony rises.

It has been observed that in the Merri Creek area the original strained and fractured surfaces of the stony rises were widened by weathering, 'which proceeds along joint planes and in linked vesicles in the basalt'.[29] Jointed basalt blocks of foundation stone not only made the stony rises porous, and accommodated the roots of river red gums, but the weathering of their fractured surface outcrops provided stone that could be split. The Merri–Darebin Plains stony rises not only had had detached boulders, but also horizontally fractured, 'platey' outcrops, from which round, flat-bottomed stone was easily procured. Locals found that the readily split natural fractures of boulders on top of the stony rises provided at least one flat side with which to build walls. This produced the unconventional construction style that characterises Merri–Darebin Plains dry stone walls, in which 'large flat-bottomed stones' placed on edge, together with massive rounded boulders laid out along the wall (traced), produced cyclopean wall faces, apparently with a wider base and, at least on the bottom courses, a smooth batter and a vertical elevation, and rubble construction above.[30]

## Stony Rises Habitats and Uses

Pioneering squatter Peter Manifold recounted that when he arrived in the Western District Stony Rises he found numerous stone circles, which he described as Aboriginal camping places. Large stones were set on edge, sheltering a central fire place from the wind.[31] Large flat stones were also a feature of the Merri–Darebin Plains stony rises, and may have been used the same way. A study of sites, such as middens, artefact scatters, quarries, and scarred trees, and of the broader significance of the Whittlesea stony rises to local indigenous people is presently underway.

The soils of the 'low stony rises on basalt flows' are described as 'fertile and well drained but shallow', with outcropping rock, causing severe summer dryness'.[32] Still, the importance of stony rises in hosting remnant, sometimes endangered, flora and fauna, is widely recognised. Prominent amongst these are River Red Gums (Eucalyptus camaldulensis), shrubland of Acacia species, Melicytus dentatus (Tree Violet) and Bursaria spinosa (Sweet Bursaria), Allocasuarina verticillate (Drooping Sheoak), and grasses such as Amphibromus pithogastrus (Swollen Swamp Wallaby-grass) and Carex tasmanica (Curly Sedge). Parts of the Whittlesea stony rises are also habitat for mobs of Eastern Grey kangaroos, and endangered volcanic grasslands species such as the Striped Legless Lizard, the Plains-wanderer, the Growling Grass Frog, the Golden Sun Moth, and Lathams Snipe.[33]

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[26] Joyce, EB, 'Geology, Environment and People on the Western Plains of Victoria, Australia: The Stony Rises' (http:///earthsci.unimelb.edu.au/Joyce/geology/ )
[27] National Trust of Australia (Victoria), 'The Stony Rises', File No.L10273
[28] McAndrew, Marsden, *op cit*, p.35
[29] Merri Creek Management Committee, Chapter 2, 'Geological Significance', in *Sites of Geological and Geomorphological significance in the Merri Creek Catchment*, based on report by Neville Rosengren, La Trobe University, 1993
[30] Paul Schultz, personal comment, 15th March, 2013; John Borrack, *Lamplight and Bluestones: Recollections of the Ziebell farm at Thomastown*, John Borrack, Melbourne, November 1998, p.31.
[31] National Trust, Stony Rises classification report, *op cit*, p.7
[32] 'Grassy Eucalypt Woodland of the Victorian Volcanic Plain', listing advice to the Minister for the Environment, Heritage and the Arts from the Threatened Species Scientific Committee on an Amendment to the List of Threatened Ecological Communities under the EPBC Act, 1999.
[33] 'Strategic Directions for Merri Creek Parklands', October 2008, pp.3-4; Department of Sustainability and Environment, 2008

The local river red gums were used to build post & rail fence, and in many parts were liberally cut for firewood and carted to Melbourne to supplement the income of struggling farmers. While in places swarths would have been removed or thinned to enable cropping, they survived on the stony rises, which could not be cultivated, and whose mineral rich, or 'sweet' native grasses were found to provide nourishing pasture.

For example, successive 1883 newspaper reports note that 'the whole district' of Woodstock is 'generally more suited for grazing than for cultivation'. It was naturally timbered with 'red and white gum and sheaoak', and the soil, either a 'rich black or a rather poorer kind of grey colour' was 'all difficult to work'. On the first property visited it was noted that the land 'in its natural state' grows:

> 'a splendid sward of herbage in which kangaroo grass predominates, and as considerable portions of the property are rendered unfit for cultivation by the presence of stone, this useful native grass holds its own very well'.[34]

Similarly, the majority of another property described by the reporter was:

> ' … still in its natural state, being excellent grazing land, and paying better as it is than if the timber on all portions, and the stones which crop up in some parts, were cleared away for the plough. Dairying has become the mainstay of the district, through the land producing naturally a fine sward of grass, and being at the same time expensive to clear and difficult to cultivate. Almost all of the settlers have recognised this fact …'[35]

The survival of the red gums in turn contributes greatly to the stony rises dry stone walls landscape. In some parts, such as *Fenwick Stud* with red gums and associated shrubland, they constitute an outstanding landscape context.

***Image 5:*** *Stony rise north of Craigieburn Road, showing protruding and loose surface boulders, some large, of the type used to build the dry stone wall behind. (David Moloney, 2019)*

[34] *The Leader,* 9th June 1883, p.10
[35] *The Leader*, 16th June 1883, p.10

*Image 6: O'Hern's Road near Merri Creek: surface stone on top of stony rise, showing natural horizontal fracture. This example may be too slim for building, but this style of flat-bottom stone could easily be prised off with a crowbar, or tapped off with a heavy hammer. (David Moloney, 2019)*

*Image 7: Where loose surface boulders weren't sufficient, stone would be quarried from outcrops on the stony rises. The blocky stone at this old grubhole on the former William Bodycoat property Langton Lodge, Medlands Estate, appears to be a source of stone for walls such as that in the background, which includes many oversize stones. (David Moloney, 2019)*

# Chapter Two

## The Whittlesea Historical Context

Whittlesea's dry stone walls preserve an important part of Victoria's farming history, and are distinctive in Victoria.

Historically, the Merri–Darebin Plains feature prominently in three key phases of Victoria's farming story.

Firstly, it was a key part of the initial official farming land in Victoria. The fledgling European pastoral settlement imported most of its food, so in 1838 the government sold the first country land, in the parishes of Will Will Rook, Keelbundora, and Wollert. However the lots were sold in very large holdings (640 – 1200 acres) and then let to tenant farmers, or privately subdivided into small farms for sale. Parts of the parishes of Wollert and Keelbundora in the City of Whittlesea retain key areas that have not been fully urbanised, and where some evidence of this first farming phase might remain.

Secondly, the area clearly demonstrates the post-goldrush change of policy towards small freehold farms. In 1853 the government sold the balance of the parish of Wollert in small allotments (c.80-300 acre), many of which were soon occupied by German families who had been attracted to the area through the recent establishment of Westgarthtown. In the same year the market also responded to the pressure for small farms, and some 30 blocks of about 50 acres were sold at the Medland Estate in the parish of Kalkallo, abutting the Wollert blocks.

Thirdly, farming in the Port Phillip district was transformed in the early 1860s from grain for human consumption to feed-crops for dairy cattle and horses. As diseases and pests ravaged wheat crops in Port Phillip, railways were extending into the north of Victoria where land was being opened for Selection and wheat flourished. The wheat belt was moving north. At the same time, supply of fresh milk was becoming profitable for farmers on the fringe of the growing metropolis, and for most of the next one hundred years the Whittlesea area was a prime supplier of Melbourne's milk. Its predominantly German, Irish and English community of small farmers tenaciously walled the blistered landscape, while concurrently Victoria's biggest dairy farms were established on the large holdings that dated back to 1838.

### HISTORICAL CONTEXT: THE MERRI–DAREBIN PLAINS

Although it was not afterwards the most sought after part of Melbourne, the Merri–Darebin Creek area was a key part of Port Phillip in the very early years of European exploration, pastoral occupation, and farming.

### Exploration and Pastoral Occupation

In 1824, Hume and Hovell climbed one of the volcanic hills in the vicinity of Kalkallo and looked out over the headwaters of the Merri, Deep and Moonee Ponds Creeks towards Port Phillip. Hovell made a portentous declaration: '…never did I behold a more charming and gratifying sight…' The explorers described the landscape as having patches of open forest, and conical hills, with a few trees upon them, which occasionally rose above the 'very extensive' plain, and 'all the soil the best quality'.[36]

[36] Andrews, AEJ (ed), *Hume and Hovell 1924*, (Blubber Head Press, Hobart, 1981), pp. 201-203. See also Lemon, A. *Broadmeadows: A Forgotten History*, (City of Broadmeadows/Hargreen, Melbourne, 1982), p.11.

The reports of Hume's journey encouraged his childhood friend John Batman to cross Bass Strait.[37] In 1835, travelling eastwards towards the Merri Creek valley near Yuroke-Craigieburn, Batman recorded his impressions:

> 'We then came upon beautiful open plains, with a few wattle and oak, gentle rising hills of very rich black soil, with grass up to our middle and as thick as it would stand.... this land I think was richer than any high land I have seen before...'.[38]

The Port Phillip Association's 6th June 1835 map of Batman's exploratory tour describes what appear to be the lower parts of Merri Creek as 'Richest description of Country'. Further north the Merri Creek area is shown as 'Thinly timbered country'.[39] Similarly, early maps by Port Phillip Association's surveyor Wedge mark this area as, variously, 'open plains rich pasture', and 'open plains good grass'.[40]

While its exact location is unknown, most historians have regarded Batman's treaty site as being on the Merri Creek, although the Plenty River, Edgars Creek, and Darebin Creek have also all had their supporters.[41]

In January-February 1836 prominent Port Phillip Association member JT Gellibrand toured the whole of the Association's treaty area, from the Bellarine Peninsula to the Plenty River. He reserved his highest praise for the land near Craigieburn on the Merri Creek:

> '...we came upon a most beautiful vale, extending, apparently, several miles to the northward, and extending over part of No. 6 and 7. This vale contains about 20,000 acres of the richest quality and of the finest herbage I ever saw, and, in my opinion, far superior to any of the land upon No. 9 or any other sections.'[42]

The allotment numbers referred to by Gellibrand had been created by the Port Phillip Association for allocation to its members. Nos.6 & 7 ran east-west, from west of the Merri Creek to the Plenty River, and No.9, immediately south, ran east-west with the Merri Creek as its centre.[43]

As an estimation of its worth, Gellibrand named Merri Creek 'Gellibrand's Rivulet' on his c.1836 plan of his journey. Batman's estimation of the worth of the Merri valley is also evident by his apportioning Allotment No.9, which centred on the Merri Creek, to himself.[44]

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[37] Sayers, CE (ed.), Bonwick, J, *John Batman, The Founder of Victoria*,(1867), facsimile edition, (Wren, Melbourne, 1973), pp xiii, 13-15. In 1827 Batman and JT Gellibrand had unsuccessfully applied to the Governor of NSW for permission to explore and settle the grazing land across Bass Strait.

[38] Billot, CP, *John Batman: The Story of John Batman and the Founding of Melbourne* (Hyland House, Melbourne, 1979), p.96. Note that while some historians have estimated that Batman's party camped on Merri Creek that night, Stuart Duncan ('In the Steps of John Batman', RHSV Excursion Notes, 26/2/1989, p.8) suggests Yuroke Creek. It is also possible that this camp was on the nearby Aitken Creek, which flows into the Merri Creek at Craigieburn (less than a kilometre from the southern Batman Sheep Station site).

[39] Cannon, *MacFarlane*, Historical Records of Victoria, Vol.1, *op cit*, p.4

[40] Billot, *op cit*, opposite p.82; Campbell, *op cit*, opposite p.121. Later surveyors of the parishes of Kalkallo and Wollert, perhaps in a different season, reinforced these descriptions with phrases such as 'good pasture' and 'thin of timber', but also qualified them somewhat with descriptions of parts as 'good pasture but destitute of water' and 'thin of timber indifferent quality' (eg, PROV Historical Plans: K2 Sydney; Roll Plan 104A)

[41] Eg, Shaw, AGL, *A History of the Port Phillip District: Victoria Before Separation, Miegunyah*, Carlton, 1996, p.46; Harcourt, R, *Southern Invasion Northern Conquest: Story of the Founding of Melbourne*, Golden Point Press, Burwood, 2001, pp.40-45

[42] Duncan, JS 'The Port Phillip Association Maps', in *The Globe*, No.32, 1989, pp.53-55; Sayers, CE (ed.), Bride, TF (ed) *Letters from Victorian Pioneers* (South Yarra, Currey O'Neil, 1983) p.26

[43] The 'Wedge MS' map, the 'Wedge and Others' map, the 'Wedge & Gellibrand' map, in Billot, *op cit*, opposite p.82, and Duncan, *op cit*, passim;

[44] The early 'maps' were figurative, and exact locations are uncertain. Payne, *op cit*, for example, estimates that PPA member Thomas Bannister was apportioned this area.

It is also highly likely that Merri Creek was the 'Gellibrand's Valley' or 'Creek' noted by Governor Bourke and Captain Phillip King on their March 1837 tour of the Port Phillip district. On this journey King noted that Gellibrand had three stations on this creek.[45] Governor Bourke's diary of 7th March 1837 notes that, after spending the morning in the town … 'In the afternoon rode through a beautiful valley to a station of Mr Batman's and Mr Gellibrand's.'[46]

On about 21st August 1837, during his survey of the Merri Creek and Plenty River, Robert Hoddle recorded two sites as 'Batman's sheep station', on the west banks of Merri Creek, the southernmost situated on the west side of the Merri Creek just south of Craigieburn Road, and the northernmost also on the west side of Merri Creek at Kinlochewe, near Summerhill Road.[47] These two Merri Creek sites, together with another on the Moonee Ponds Creek near Flemington, were the permanent sites chosen by Batman for his sheep stations.[48]

This rich upper Merri Creek valley became well-known in early pastoral circles as 'Mercer's Vale', after George Mercer, the Port Phillip Association's English agent.[49] Mercer's Vale was the original name of the Parish of Merriang.[50] Apparently the original pastoral licensee of Mercer's Vale was Archibald Thom at Beveridge (then called Mt Bland, afterwards Big Hill, and then Mt Fraser).[51] In 1837, in addition to John Batman and James Malcolm on the Merri Creek, eastwards on the Darebin Creek (in about the location of Epping town) was 'Mr Smith's sheep station'.[52]

The turnover of pastoral licences in the Settled District was considerable in the 1830s and 40s, often as a result of sheep diseases, and bankruptcies particularly during the 1840s depression. In 1840 Charles and JDL Campbell were the licensees of the Campbellfield run, which in 1846 had passed to Neil Campbell.[53] The station of J Pike is later shown on or near to the Darebin Creek.[54] Whittlesea historian JW Payne notes that 'Pikes Water Hole' at Wollert is named after him.[55]

## Early Land Policy

A major theme in the story of Australia's European settlement has been the contest between large pastoralists and aspiring small farmers for the land.

The first period of government land policy, until about 1825, had included the objective of developing a peasantry by providing small grants with improvement conditions. In the second period a trial was made in delegating the agricultural settlement process to the private capitalist, by sale without conditions, at minimum (ie high) prices, and in minimum (ie large) allotments. It also saw brief experiments with more extreme theories in uniform pricing and Special Surveys. The third period, from 1851, saw responsible government resume the task of supplying smaller affordable farming allotments and, ultimately, in the Selection Acts, a recommitment to the return of sale with conditions, terms payment, and the 'yeoman idyll'.

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[45] Cannon, *MacFarlane*, HRV, Vol.1, *op cit*, pp.105-106, 116. The other possibility for 'Gellibrand's Valley' is the Moonee Ponds Creek.
[46] Cannon, *MacFarlane*, HRV, Vol.1, *op cit*, p.102.
[47] Lands Victoria:- Roll Plan 104; Roll Plan 104A; Robert Hoddle's journal. State Library of Victoria, Box 53(4); Robert Hoddle's field book: CPO, Bundle 79, Bk 1151. In 2000, with the assistance of a surveyor and archaeologists, these sites, and potential archaeological fabric, were identified.
[48] Roll Plan 104A 'Melbourne Surveyed Lands Northwards'; Moloney, D, 'John Batman Sheep Station Sites, Merri Creek Craigieburn …', Submission to Planning Panels Victoria, 24th September 2000.
[49] Brown, PL, *The Narrative of George Russell of Golf Hill with Russellania and selected papers*, OUP, London, 1935, p.114; Payne, JW, *The History of Beveridge*, Lowden, Kilmore, 1974, p.3
[50] Payne, 1975, *op cit*, p.47
[51] Payne, 1975, *op cit*, pp.4, 47, 100
[52] PROV, Historical Plan: Roll Plan 103 (1837); Roll Plan 104 (1837).
[53] Spreadborough, R, Anderson, H, *Victorian Squatters*, Red Rooster Press, Ascot Vale, 1983, p.260
[54] *ibid*, Appendix map of Settled District
[55] Payne, 1975, *op cit*, p.6

The second period was a phase of change, experimentation, and confusion. It reflected the influence of the 'systematic colonisers' and Australian pastoralists on government policy, as well as the government's own dependence on land sales to finance immigration. The 'Wakefield Theory', says Roberts, 'won over the Colonial Office and became the greatest influence on colonial affairs in the thirties'; his influence brought about the 'experiments of the thirties' regarding land sales.[56] The view was that the 'capitalist' should be 'the forerunner of colonial settlement, his enterprise opening up new regions in readiness for the subsequent influx of farmers and smallholders.'[57] The wealthy were privileged in order to restrict access to land by the poor, whom Britain was encouraging to immigrate for its own economic and political reasons, and who would relieve the rural labour shortage in Australia.

This policy held sway during the formative period of Port Phillip, including in 1838 when the parishes of Keelbundora and Wollert were sold. Although the Merri Creek land was intended for farming rather than pastoral use, sale in such large allotments – some over 1200 acres (485 hectares) – with a minimum price, made purchase impossible for the small farmer. The theory failed dramatically. Instead of land being purchased and developed as country estates by local squires employing farm laborers, the Merri–Darebin Creek land was in fact largely purchased by Sydney speculators and absentee landholders who made no investment in the land at all.

The imprint of the land policies of this period on the development of farming remained well into the twentieth century in terms of land size, ownership, and use. The singular consequences of the policy in the study area became evident later in the nineteenth and twentieth centuries.

## The First Farming District in Port Phillip

Very early, before even the plan of Melbourne had been finalised, the first sales of country land in Port Phillip occurred in two districts: parishes north of Melbourne between the Merri Creek and Plenty River, and parishes north and west of Geelong, essentially between the Moorabool River and the Barrabool Hills.[58] These sales took place on 12th September 1838, and included the parishes of Wollert and Keelbundora.

Wakefieldian theory hadn't fully appreciated the aspiration of people of small means to attain their own farms. Sydney partners Hughes & Hosking purchased every one of the allotments sold in the Parish of Wollert in 1838, a total of 7783 acres sold in just 8 allotments to a single purchaser. This was the premier farming land in Wollert – the best watered land along the Merri Creek and the Darebin Creek.[59] While most of this land quickly passed to Sydney investor Charles Campbell, who subdivided and sold his 'Argyle Estate' of small farms on terms, the ensuing 1840s depression meant that the farmers who purchased these allotments couldn't keep up their payments, and Campbell resumed the land.[60] The great majority appear to have been able to access this premier Port Phillip farming land only by becoming a tenant on parts of the huge parcels purchased by speculators.

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[56] Roberts, Stephen H, *History of Australian Land Settlement 1788-1920* (Macmillan, South Melbourne, 1968), pp.84, 93.
[57] Burroughs, Peter, 'The Fixed Price Experiment in New South Wales, 1840-1841', in *Historical Studies Australia and New Zealand* (Vol.12, No.47, Oct 1966), pp.392-394; also Kociumbas, J, *The Oxford History of Australia: Possessions, 1770-1860* (OUP, South Melbourne, 1995), eg, Chapter 7 'All That Capital'.
[58] Cannon, M, MacFarlane, I, *Historical Records of Victoria*, Vol.5, VGPO, Melbourne, 1988, p.410; Peel, L, *Rural Industry in the Port Phillip Region 1835-1880*, Melbourne University Press, Carlton, 1974, pp.37-38. ('Country' lands were distinct from 'suburban' or 'cultivation' lots which were up to 28 acres.)
[59] Cannon, M, MacFarlane, M, *Historical Records of Victoria, Vol.5: Surveyors' Problems and Achievements, 1836-1839* (VGPO, Melbourne, 1988), pp.127, 308, 309
[60] PROV, VPRS 460/P0/2723, Torrens Application 26860

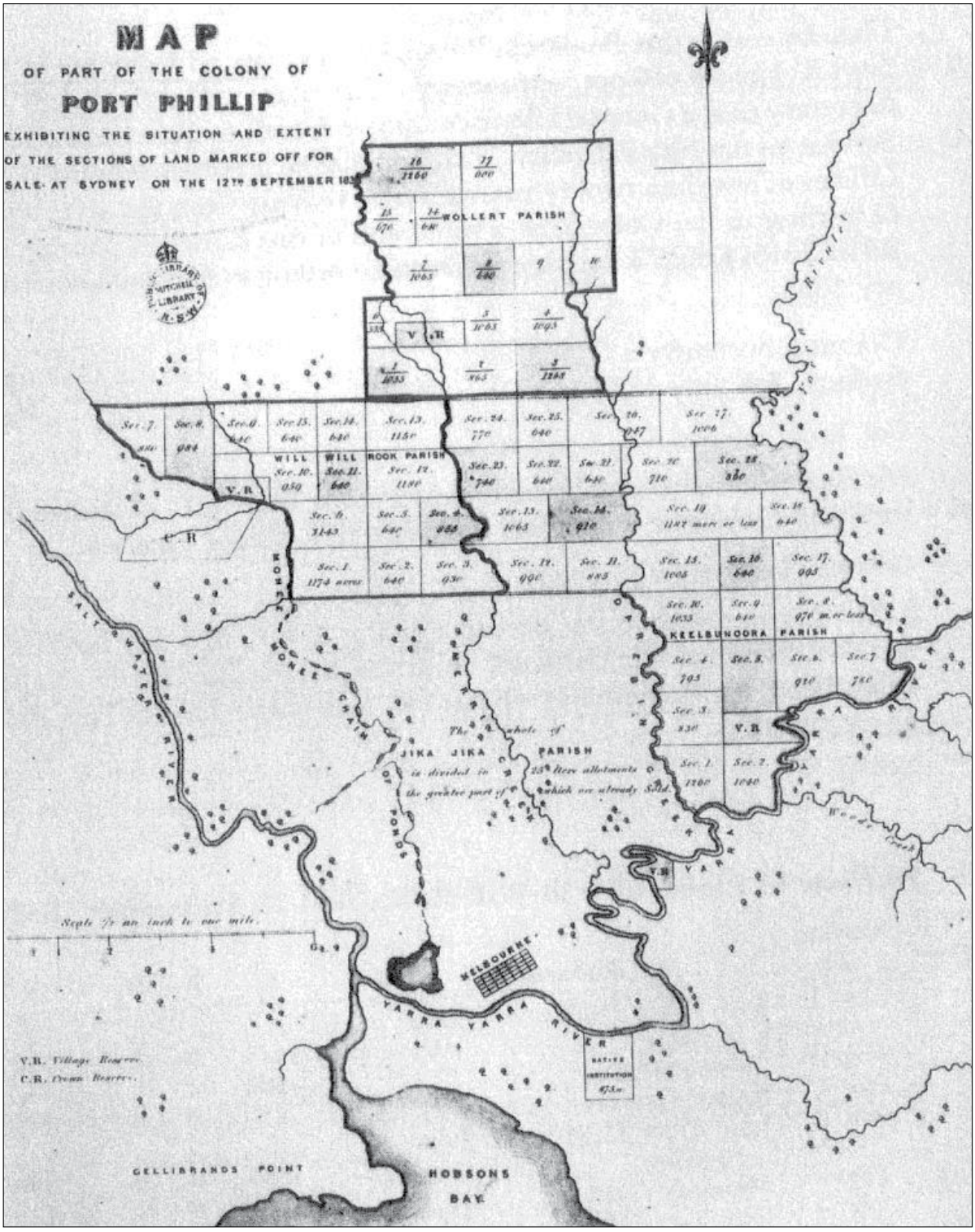


*Image 8: The first sale of 'country' land by the Crown, held 12th September 1838 in Sydney. The parishes of Wollert at top, and to its south the parish of Keelbundora along the Merri Creek, were prominent. These parishes retain expanses and belts that have not now been completely urbanised. (Historical Records of Victoria, Volume 6)*

In 1840 the government continued selling lands further up the Merri Creek, in the parishes of Kalkallo and Merriang, along the Darebin Creek at Epping, and along the Plenty River.[61] Victorian historian Don Garden notes that these areas 'became the major agricultural regions in Port Phillip.'[62] Local historian JW Payne observed that the 'Plenty and Merri valleys were regarded as the granaries of Melbourne.'[63] Surpassing references, such as 'the deservedly celebrated Merri Creek', appear throughout rural land sale advertisements of this period.[64]

Lynette Peel, the historian of early rural industry in Port Phillip, also notes that Sydney Road, parallel to the Merri Creek, divided the pastoral and agricultural districts of early Port Phillip. Grazing and cropping activities in Port Phillip in the late 1830s and 40s were distinct and separate enterprises:

> 'Most of the cropping was carried on to the north of the Yarra River and east of the Sydney Road .... particularly on the cracking clay soils close to Melbourne in the vicinity of the Moonee Ponds, Merri, and Darebin Creeks and the Plenty River. To the west of Sydney Road, on the hard red plains, sheep grazing predominated and probably there was some cattle grazing too, rather than cropping.'[65]

While the land north of Melbourne was sold for farming in the 1840s, the government continued to lease the majority of the land west of Sydney Road to pastoralists.

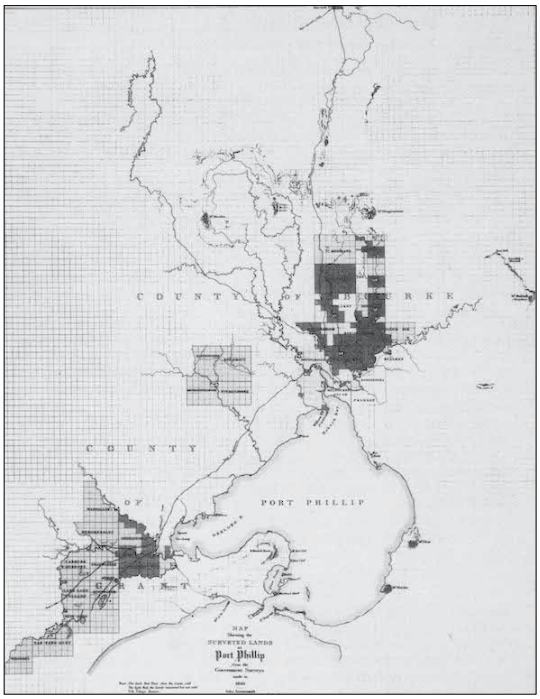


***Image 9:*** *The sold portions of Crown land (marked in black) in Port Phillip in 1840, two years after the first sales. While much of dry land in the parishes of Wollert and Keelbundoora remain unsold, much of the parish of Kalkallo and much land along the Plenty River have by this time been sold. (Arrowsmith 1840) By 1847 the situation had barely changed. (Peel, 1974, p.25)*

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[61] See eg:- Lands Victoria, Parish and 'Put-Away' Plans (Wollert, Jika Jika, Kalkallo, Yuroke, Toorourrong, Meriang, Kelbundoora, Yan Yean; parts of the Parish of Geringhap at Geelong were also subdivided and sold early); Lands Victoria, Roll Plan 104; Peel, LJ, *Rural Industry in the Port Phillip Region 1835-1880*, MUP, 1974, p.25; Scurfield, G & JM, *The Hoddle Years: Surveying Victoria, 1836-1853*, The Institution of Surveyors, Canberra, 1995, pp.73-91

[62] Garden, D, *Victoria: A History*, Nelson, Melbourne, 1984, p.45

[63] Payne, 1975, *op cit*, p.51

[64] *Port Phillip Gazette*, 6th January 1841, p.4

[65] Peel, *op cit*, p.20

Throughout the 1840s the major crop on Melbourne's small farms, mostly between the Merri Creek and Plenty River, was wheat. In 1845 the Merri Creek had 2067 acres under wheat, nearly twice as much as the next largest districts, the Yarra River and Moonee Ponds Creek, and two and a half times more than the Plenty River. It was also second to the Moonee Ponds Creek in acres sown to barley. Darebin Creek was also listed as a significant producer of wheat, oats, potatoes and barley, but this was presumably on the alienated land on the lower reaches of the Creek.[66]

Some of these crops would have been grown on the lower reaches of the Moonee Ponds Creek in the Parish of Jika Jika, and of the Merri Creek, which likely supplied Dights Mill at the junction of the Merri Creek on the Yarra River. The substantial remains of this mill, and others on the Plenty River, have perhaps created the impression that these were the major wheat growing areas in early Port Phillip. However Merri Creek was the centre of early wheat production. Fragments of history and archaeology reveal that there were at least two now forgotten mills on the Merri Creek. On the banks of the Merri Creek at Campbellfield archaeological evidence has been found of the Barber & Sons Flour Mill.[67] The Kalkallo Steam Flour Mill was built by 1857 and had ceased production around 1872.[68] Cereal cultivation was such as to induce, albeit briefly and unsuccessfully, a flour mill at Thomastown.[69] Although built later, the names of inns in the vicinity of Campbellfield, including the Wheatsheaf Hotel (now the First & Last), and the former Plough Inn, as well as the former Harvest Home Hotel at Wollert, are also pointers to the important role of cultivation in this district.[70]

Table 4
Area (acres) under Crop near Melbourne, 1845

| Location | Wheat | Barley | Oats | Potatoes | Maize | Garden | Vines | Turnips | Lucerne | Peas | Tares |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Darebin Creek | 926 | 66 | 187 | 45 | 9 | — | — | — | — | — | — |
| Plenty River | 855 | 66 | 266 | 75 | 23 | 5 | 5 | 5 | 6 | — | — |
| Yarra River | 1286 | 193 | 771 | 244 | 4 | 41 | 5 | — | 9 | — | 1 |
| Merri Creek | 2067 | 227 | 765 | 150 | — | 57 | — | — | — | 16 | — |
| Moonee Ponds | 1183 | 280 | 1556 | 173 | 10 | 48 | 6 | — | — | — | — |
| Brighton | 110 | 40 | 100 | 40 | — | 10 | — | — | — | — | — |
| Total | 6427 | 872 | 3645 | 727 | 46 | 161 | 16 | 5 | 15 | 16 | 1 |

Source: J. D. Lang, *Port-Phillip*, p. 102

*Image 10: Peel, 1974, p.43*

The number of early Presbyterian Churches in the area reveals the prominence of Scots in the area, both as pastoralists and tenant farmers, in this early period. In 1842 Campbellfield became the third Scots Church in Victoria. Rev. Peter Gunn, who could speak the Gaelic tongue of local Highlanders, also preached at other Presbyterian churches in the district, including Rocky Water Holes (Kalkallo), Janefield, Epping and Thomastown.[71]

[66] Peel, *op cit*, Table 4, p.43
[67] Moloney, D (with R Storey) 'City of Hume Heritage Review 2003', Place No.207, p.727. This review was based on Ford, O, Vines, G, Butler, G, Gilfedder, F, 'Hume Heritage Study: Former Broadmeadows Area and Environs, 2000', which reported the footings. These may have been damaged or overgrown, as they were unable to be located in 2003.
[68] Payne, 1975, *op cit*, pp.134-140
[69] *ibid*, p.75
[70] Lemon, A, *Broadmeadows, A Forgotten History*, Hargreen, West Melbourne, 1982, p.43
[71] Moloney, 2003, *op cit*, Place Nos.17-19, pp.65-72.

One of the early Scottish communities was established by prominent early Port Phillip pastoralist James Malcolm on his freehold land at Mt Ridley. After an 1843 visit to his property, which was situated between the soon-to-be established mills at Kalkallo and Campbellfield, the travelling Presbyterian minister John Dunmore Lang wrote that as well as being one of Port Phillip's largest graziers, Malcolm was also its largest cultivator of soil. The land in the vicinity he said 'consists of a rich brownish loam, and the crops have never failed from drought'.[72]

Lang was impressed by the potential of Port Phillip for Scottish crofters, and one of the most promising communities, he said, was 'Kinlochewe', a tenant farming settlement adjacent to Malcolm, on the Merri Creek at Mt Ridley – Summerhill Road. This exact site (together with another further down the creek at Craigieburn) had earlier been chosen by John Batman as an outstation.[73] Lang elsewhere noted that the Merri Creek was the main area for wheat cultivation in Port Phillip.[74]

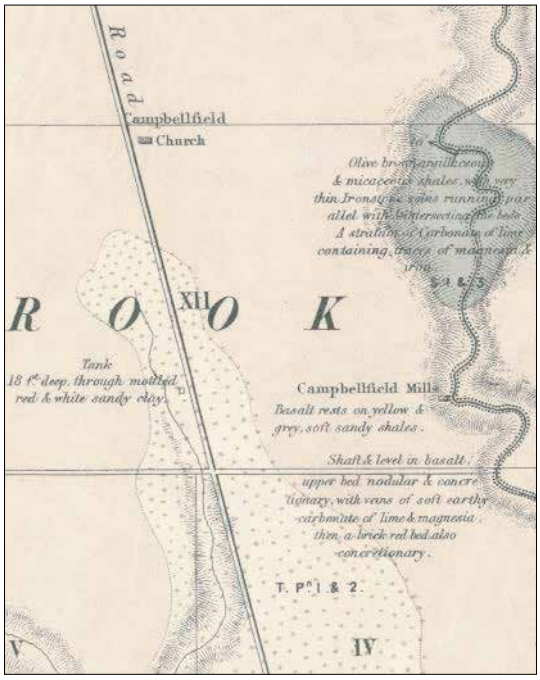


***Image 11:*** *The location of the Campbellfield Mill on the Merri Creek was 4 kilometres south of the surveyed (but never developed) Wollert 'Village Reserve'. The extant Campbellfield Presbyterian Church (1855) is the other feature shown on the map. (Part of Geological Survey of Victoria: 'Tullamarine, Will Will Rook', 1860)*

When wheat cropping moved to northern Victoria in the 1860s much of the land near the Merri Creek was resumed for grazing, for sheep and cattle in the north, and dairying in the south. The vestiges and memory of early farming practices all but disappeared.

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[72] Lang, John Dunmore, *Port Phillip, or the Colony of Victoria*, (Glasgow, 1853), pp 293-4.
[73] Moloney, David, 'John Batman Sheep Station Sites: Preliminary History and Heritage Assessment', in submission to Hume Freeway F2 Link Panel Submission, 27th October 2000; that this was on the southern half of W McKenzie's CA 11 Parish of Kalkallo is confirmed by other land advertisements (eg 'the splendid Estate of Hawkville, *Port Phillip Gazette*, 26th May 1841)
[74] Lang, *op cit*, p 102

## The Gold Rush: Turning Point

The relatively small amount of Port Phillip land that was sold in smaller allotments after 1843 was insufficient to accommodate the demand for land. 'The predominating influence of the man of capital, who had already bought the best land, remained.'[75] Most small farms were rented from these large landholders, but the popular mood sought freehold rather than tenancy of small farms.[76]

From the early-mid 1850s however there was a dramatic decrease in the size of country land parcels sold by the Crown. There was an urgent need to create farms with which to feed the huge influx of gold-rush immigrants. An increasingly busy Crown Land Survey department divided the unsold lands of old Parishes, and new Parishes situated near populated areas, into smaller farming allotments.

Then, gradually, the balance of political power shifted as the alluvial gold diminished and diggers clamoured for land.

The Parish of Wollert dramatically illustrates the change that occurred. In 1838 the Crown sold 7783 acres of Wollert's premier farming land in 8 allotments, of average size 973 acres, to one purchaser. Fifteen years later in 1853 the Crown sold the remaining 7040 acres in the parish (most of which had no access to permanent streams) in 41 allotments, of average size 172 acres, to 29 different purchasers.[77]

The intensity of dry stone walls in the Epping and Wollert area is the direct consequence of the intensive farming carried out by the small farmers who were able to settle after 1853.

Other vestiges of this period, for example the considerably later (1867) subdivision and sale into twelve 15-30 acre allotments of the original surveyed Wollert 'village reserve' (Crown Sections 5 & 6), also survive. The dilapidated relics of the dry stone walls associated with it were classified by the National Trust, but the site has since been subject to heavy redevelopment.[78] Part of the northern boundary wall east of Merri Creek are extant, and satellite images suggest that other vestiges of the boundary may survive. A 2004 archaeological study identified the ruins of a bluestone hut and dry stone wall enclosure on the former village site, although on the west bank of Merri Creek, and in an area since redeveloped.[79]

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[75] Peel, *op cit*, p.38

[76] The inaccessibility of Crown land to small farmers was the reason that John Pascoe Fawkner in 1849 initiated a number of Land Societies, known examples being near Bulla and at Geelong. He purchased 640 acre Crown allotments on behalf of people of small means which were then subdivided into allotments of 10-50 acres, and taken up by the co-operative members. (State Library of Victoria, Manuscript Collection, 'Fawkner Papers', Box 3660/Folder 3; Billot, CP, *The Life and Times of John Pascoe Fawkner*, Hyland House, South Yarra, 1985, p.266) Fawkner purchased a number of allotments north of Melbourne also, including the 640 acre allotment west of the Merri Creek in the parish of Will Will Rook that later became the suburb of Fawkner.

[77] Parish Plan: Wollert

[78] National Trust of Australia (Victoria), File No.B7161

[79] Clark, V, 'Cultural Heritage Investigation of Land along Merri Creek, North of Cooper Street, Somerton', Report to Victorian Transport Centres Pty Ltd, 2004, p.16; Victorian Heritage Database H78822-0787

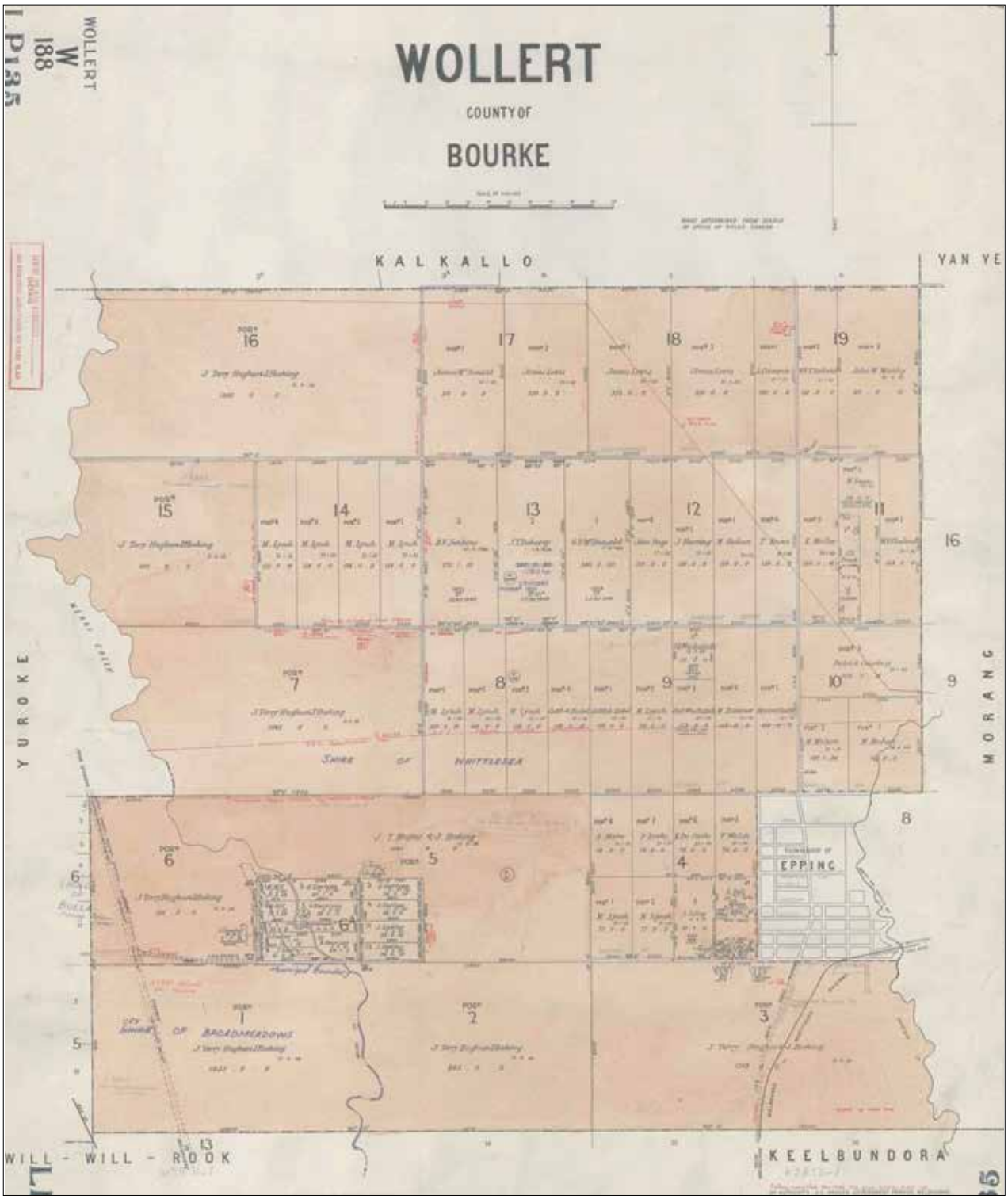


*Image 12: The Parish of Wollert. The contrast between the 1838 Crown Land Sales (the large allotments adjacent to the Merri Creek and the southern portion of Darebin Creek), and the 1853 Crown Land sales (the small allotments in the relatively dry centre and north-east of the Parish) dramatically illustrates the change in Government land policy. (PROV, Wollert Parish Plan, Imperial Measure)*

## Dairying in Wollert: Small Farms and Commercial Farms

The 1850s revolution, in which tenant farming was generally succeeded by freehold farming, was followed in the Port Phillip district by a second revolution: the 1860-1864 replacement of cultivation with pasture.

- From Cultivation to Pasture

  Whereas Victoria was founded as a sheep run, the Wollert area was an early mixed farming area supplying the nearby Melbourne market. From its 1850 inception Westgarthtown residents were engaged in dairying, initially at a subsistence level, but after the gold-rush regularly sold excess dairy products, hay, chaff, vegetables, fruit and eggs.[80] By the 1850s wheat, butter, eggs and potatoes were payable commodities, and the gold rush further increased the demand for flour, dairy produce, meat and horse fodder.[81]

  But in the early 1860s there was a wholesale conversion of farming in Port Phillip from cultivation to pasture for dairying, sheep, and beef cattle. As the goldrush subsided boom prices for wheat collapsed, the good early yields quickly exhausted poor soils, and local crops were infested with rust and caterpillars and decimated by droughts. Wheat, cheap to transport, was soon imported into Melbourne both from overseas and from the new land being opened in northern Victoria. Statistics show that the wheat crop in the Port Phillip district crashed between 1861-1871, while the amount of land used for hay exploded, and sown pasture increased.[82] Hay production fed the dairy cattle and farm work horses and, until the early twentieth century, the horses upon which Melbourne relied for transport.

  In 1870 Dr Wilson of *Summerhill* related that in 1853 he had grown crops on 300 acres, but now had only 40 acres under cultivation.[83] Sheep, and particularly dairying, were the most profitable parts of his model mixed farm now. Brief contemporary autobiographical sketches of farmers in the County of Bourke confirm this movement away from grain cropping to dairying.[84]

- The Development of Dairying in the Merri–Darebin Province

  The very early foundation of the district, and its long dairy history, were once well-known. An 1891 newspaper report on a 'milk farm' referred to 'the ancient township of Epping.'[85] In 1921 the *Weekly Times* reported that the district of Wollert 'is one of the oldest milk producing areas in Victoria, and is probably one of the least known'.[86]

[80] Robert Wuchatsch, *Westgarthtown: The German Settlement at Thomastown*, Robert Wuchatsch, Melbourne, 1985, p.82
[81] *The Whittlesea District*, Whittlesea Agricultural Society Publication, VA Reid, nd (c.1947)
[82] Peel, *op.cit*., p.95
[83] 'A visit to Summer Hill, the estate of Dr Wilson', *The Leader*, 10th December 1870, p.6
[84] Sutherland, A, *Victoria and Its Metropolis, Past and Present*, McCarron Bird, Melbourne, 1888, pp.419-439
[85] 'An Epping Milk Farm', *The Leader*, 22 August 1891 (1992), p.82.
[86] 'Farming at Woodstock', *Weekly Times*, 9th February 1884

In the nineteenth century, before improvements in transport, irrigation schemes and other technological developments, dairying was largely confined to areas surrounding Melbourne, and scattered throughout Central Victoria, where a ready market existed for dairy produce.[87]

The demand for dairy products had increased greatly in the 1860s and 70s. Melbourne was growing, and its town commons, where urban dwellers of the 1850s had grazed a milk cow, were being sold. By the 1860s comparatively few cows were owned by city dwellers, particularly in inner areas. And by the end of the 1860s, Victoria as a whole was still importing large quantities of butter and cheese. So at the same time as cereal cropping collapsed in Port Phillip, dairying became an assured alternative income for small farmers. Peel suggests that the 'specialised' suppliers of fresh milk, in particular, were responding more to the demand from Melbourne than the collapse of cultivation in the area.[88] The small farms at Westgarthtown, Epping and Wollert were in a prime position to take advantage of this opportunity.

Larger farms on the fringes of Melbourne were also some of the first recognised 'factory' cheese-makers to establish in Australia, for example at *Summerhill* in the study area near Craigieburn, *Tulloch* at Mickleham, *Rosegrange* at Truganina, and later (c.1875) at *Springfield*, Berwick.[89]

For the most part however dairying remained essentially a farm craft, firmly rooted in the traditional agricultural world. Beyond the limited districts that supplied fresh milk, most dairy farms produced butter, sitting milk in flat pans to separate cream, and then working this into butter with hand-operated churns and moulds. Income was supplemented by pigs which were fed on the skim milk left over after separation.

The mixed farmers north of Wollert were engaged in this type of dairying. It was reported of Woodstock in 1883 that 'butter is made on nearly all the surrounding farms, the produce being conveyed to the metropolis regularly every week.'[90] The farms in Woodstock were generally substantially larger than most further south in Wollert; Thomas Bodycoat's farm *Spring Vale* was 422 acres, while his Epping Road neighbour, Joseph Cotchin's farm was 490 acres; they milked some 30 and 40 cows respectively, about twice the size of the butter producing dairy herds on Melbourne's western plains.[91]

Woodstock was 20 miles from the centre of Melbourne, whereas in the 1880s the farmers who supplied Melbourne with whole milk were situated 10-15 miles from the city.[92] This area extended north approximately from Thomastown, through Epping and to just south of Lehmanns Road. An article in the 1920s reports these farmers every day driving their carts with cans of fresh milk to wooden stands on crossroads, to be picked up by 'lorries' and delivered to suburban dairies.[93]

Dairy farmers battled through outbreaks of pleuro-pneumonia in dairy herds and droughts in the 1860s. Herds were small, the majority 10-20 milch cows with larger ones around 40 in size.[94]

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[87] Dougall, Diane, 'Dairying', in Richard Aitken (ed), 'Farm Buildings in Victoria to 1938' (Monash Public History Group & La Trobe University College of Northern Victoria' (1992), p.82.
[88] Peel, *op cit*, 1975, pp.116-117
[89] Eg, Moloney D, Johnson, V, 'City of Hume: Heritage Study of the Former Shire of Bulla District' (1998), Vol.5, M/03-1, 'Tulloch outbuilding'; National Trust of Australia (Victoria) File B3134.
[90] 'Farming at Woodstock', *Melbourne Leader*, 9th June, 1883, p.10
[91] Vines, G, 'Farm and Dairy: the agricultural and dairy farms of Melbourne's West', Melbourne's Living Museum of the West, 1993, p.9; 'Farming at Woodstock', *Melbourne Leader*, 9th June, 1883, p.10 'Farming at Woodstock', *Melbourne Leader*, 16th June, 1883, p.10
[92] 'Farming at Woodstock', *Melbourne Leader*, 9th June, 1883, p.10
[93] 'Dairying at Wollert. Milk for the City: A Profitable Industry', *Weekly Times*, 14th May 1921, p.9
[94] Various sources, including nineteenth century clearing sales of farms, and early-mid twentieth century Soldier Settlement assessors' reports. See also Vines, G, 'Farm and Dairy: the agricultural and dairy farms of Melbourne's West', Melbourne's Living Museum of the West, 1993, p.9; Judith Bilszta, Melton & District Historical Society, research notes.

*Image 13: 'Busy morning at Wollert'. Farmers, with horse and carts, waiting for the milk truck. (Weekly Times, 14th May 1921, p.9)*

In addition to the many small farmers supplying fresh milk, the highly unusual circumstances of Wollert's 1838 alienation had left large tracts of land in single ownership, providing rare opportunity for commercial-scale suppliers of whole milk to Melbourne. In 1840 Charles Campbell had tried to sell his Argyle Estate, but the 1840s depression intervened. In the early twentieth century his Sydney descendants still owned the 'Campbellfield Estate' of 4851 acres, leased out to large commercial dairy farmers, as well as smaller enterprises run by locals such as Friedrich Winter, originally of Westgarthtown.[95]

In the 1880s it was recognised that, although a 'comparatively settled district for so long', most of the area had been little 'improved', the intimation being that this had been the result of its early Crown alienation, 'previous to the separation of this colony from New South Wales.'[96] An unexpected result of this absentee landlord ownership however was that by the 1880s the extensive undeveloped broadacres in the south-western region of the Parish of Wollert were the location of some of the largest commercial dairy farms in Victoria.

Both John Kerr and John Steven Morgan had by then moved from smaller farms in the northern suburbs of Melbourne to take advantage of the larger properties available for lease in the Campbellfield – Thomastown area. Kerr established the 'well-known Glenroy dairy' at Campbellfield on 788 acres leased from the Campbells. In 1879 his son John Kerr junior started the Glenallen dairy in the Broadmeadows district, and in the 1880s was milking 400 cows. In 1873 Morgan took up 2500 acres (of Campbell land) at Thomastown on which he milked 320 cows. Milk from this farm was carted directly to the several dairies which his family owned in the northern suburbs. In the mid-1880s Morgan's farm, by now 3571 acres stretching from Epping Road to the Merri Creek, was described as 'one of the largest dairy farms in the colony'. Also on the Campbell's estate Thomas Harrison Baker in the mid-1880s was said to be operating 'the largest dairy farm in the colony', upon which he kept 'about 600 cows.'[97]

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[95] Payne, 1975, *op cit*, pp.72-77. PROV VPRS 460/P0/2723, Torrens Application 26860

[96] 'Farming at Woodstock', *Melbourne Leader*, 9th June, 1883, p.10

[97] Payne, Whittlesea, 1975, op cit, p.75; Sutherland, A, *Victoria and Its Metropolis: Past and Present*, McCarron, Bird, Melbourne, 1888, pp.420, 428, 432; PROV VPRS 460/P/2723 (Torrens Application No.28680): Lease, Charles Campbell to Thomas Harrison Baker, 18th March 1887; Leases of 1881 and 1887 Campbell to Morgan.

In the late nineteenth and early twentieth centuries Australian dairying was revolutionised. Most of the milking on nineteenth century family farms had been carried out in the 'primitive shelters with earthen floors which became a dung-strewn quagmire in wet weather.' It was difficult to milk more than four cows an hour in these conditions.[98] But in barely a decade from 1888 dairying was transformed into a modern industry.[99] Revolutionary technical innovations included refrigeration (which made international export possible), the centrifugal cream separator, and the Babcock tester to monitor and ensure quality and pricing. The impact of fertilisers and new pastures including fodder crops such as lucerne was immense, permitting more intensive use of farms, and smaller holdings. The Victorian government began major educational, financial assistance, international marketing, and infrastructure programs for the industry. Exports became the major market for dairy products. Dairying boomed, and co-operative creameries and butter factories sprang up across the state.[100]

These technological developments coincided with a renewed clamour for small farms, which saw many of the large pastoralists' estates broken up. The good prospects for farming, and the temper of the times made it possible to introduce legislation to acquire large estates (culminating in the *Closer Settlement Act 1905*, and then Soldier Settlement schemes). The same results were achieved through the imposition of new taxes on large estates.

The break-up of the large pastoral holdings was a watershed in Australia's rural history. In 1901 there were 42,000 rural properties in Victoria. By 1914 this number had jumped to 70,500, and by 1923 it peaked at 80,500.[101] The Sydney Campbell family finally subdivided into small farming allotments their 4851 acre Argyle Estate, putting them up for sale in 1910.

Most of the milk produced by the new farmers was used for butter to take advantage of the new refrigerated export industry to Britain. In about 1900 local blacksmith James McCarthy was operating the Melbourne Chilled Butter Company creamery in Wollert.[102] As with most creameries this was likely short-lived, replaced by home separators, which supplied more dependably hygienic milk directly to butter factories.

The Epping area was presumably largely unaffected by these technical revolutions; due to its proximity to Melbourne, it remained overwhelmingly a supplier of whole milk rather than cream for butter. The early twentieth century improvements of the local roads also facilitated access to the Melbourne market, and contributed to the dominance of dairying in Epping.[103]

However the wider dairy boom did result in increased competition for Wollert's fresh milk from other rural regions, some now also connected to Melbourne by rail, and good roads.[104] Although dairying continued strongly on the small farms of the district until around 1970, the relative importance of the area declined as transport, notably bulk handling, undermined the area's traditional advantage of proximity to the city.

In the early 1920s the Wollert School inspector commented that 'The district is an outer suburban dairying one and the children in consequence are slow and of heavy intellect.'[105] The children of dairy farmers had to rise early each morning and milk the cows, and then milk again after school; a life regularly described as one of drudgery at best.

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[98] Dingle, Tony, *The Victorians: Settling*, Fairfax Syme Weldon, McMahons Point, 1984, p.115
[99] Brinsmead, G, '1888 – Turning Point in the Victorian Dairy Industry', *Australia 1988*, No. 5, pp.67-79
[100] In a few years the creameries were replaced, as produce was transported straight to butter factories or milk distributors. Dingle, *op cit*, pp.116-119; Priestly, S, The Victorians: *Making Their Mark*, (Fairfax Syme Watkins, Sydney, 1984), p.205.
[101] Dingle, *op cit*, p.193
[102] Payne, 1975, *op cit*, p.93
[103] Jones, M, *Nature's Plenty: The History of the City of Whittlesea*, Allen & Unwin, City of Whittlesea, 1992, p.260; Payne, 1975, *op cit*, p.76, says that the opening of the Whittlesea railway in 1889 was of little benefit to the local dairy farmers.
[104] *The Whittlesea District*, Whittlesea Agricultural Society Publication, VA Reid, nd (c.1947)
[105] Payne, 1975, *op cit*, p.93

Yet these family farmers had battled successfully through very hard times. The beginnings of the dairy industry in Victoria had coincided with outbreaks of pleuro-pneumonia (c.1858-1864) that devastated many herds.[106] A trying drought in the 1870s was ruinous for many,[107] while the Federation drought was one of the worst on record. Local Joseph Cotchin described hard times prior to the First World War.[108]

The Germans of the Thomastown –Wollert area quickly emerged as dairy farmers. Some had also very successfully ventured into milk distributing and processing. Carl Frahm, a son-in-law of Christian Ziebell, established the Thomastown Dairy in Little Lonsdale Street, and by the early 1860s was retailing Westgarthtown dairy produce in Melbourne. By the 1880s Andreas Keitling collected and carted milk to Fitzroy and Carlton, where the milk was wholesaled to dairymen or sold direct to householders. During the 1930s the district's milk was retailed in Preston by Albert Siebel (one of the German Westgarthtown families) who in 1934 established the Pura Dairy – now one of Melbourne's largest fresh milk brands – on Murray Road.[109]

In 1902 a branch of the Victorian Wholesale Milk Distributors Association was formed at Epping, with JS Morgan as chairman and Albert Wuchatsch as secretary. In 1904 the Epping dairy farmers formed a co-operative to cart members' milk to retailers in Melbourne and the suburbs.[110] Epping dairy-farmers were noteworthy industry advocates. 'A frequent visitor' to the home of celebrated local community figure James Bunting was his friend Major RG Casey, Federal Minister for External Affairs, and later Lord Casey, Governor-General of Australia.[111] Family correspondence shows that at one meeting around 1930 the perennial concern of price pressure by milk processors on dairy farmers was discussed, and Casey was asked to take up the issue of the formation of a Milk Board with his political contacts. In 1932 the Argyle government formed the Victorian Milk Board.

Improvements in pastures from the 1930s saw further expansion of both dairying and sheep grazing in the locality.[112] Dairying was boosted by the widespread uptake of milking machines in the area from the 1930s, and especially during the war, which meant that farmers could dispense with expensive outside labour.

Whereas the twentieth century trend was towards more specialised and intensive dairy farming or grazing, mixed farming continued in Wollert and Woodstock. By 1947 however specialised 'grazing' was also a presence in the Bridge Inn Road district.[113] A rise in absentee ownership in the Whittlesea Shire was noticed after the war, meaning that more land was withdrawn from dairying.[114]

By the late twentieth century Wollert farms were small and inefficient compared with the farms in South Gippsland, Warrnambool and the newer irrigation areas, and its farmers were being encouraged to cash-in their lucrative 'milk contracts'. Virtually all Wollert dairy farms ceased operating in the 1960s and 70s.

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[106] Peel, *op cit*, 1975, p.i19
[107] *ibid*, p.92
[108] *ibid*, p.110
[109] Wuchatsch, R, *Westgarthtown: A History and Guide* (Friends of Westgarthtown Inc, 2004), pp.11-12; Wuchatsch, 1985, *op cit*, pp. 83-85
[110] *ibid*, p.88
[111] The *Whittlesea Post*, 2nd July 1959, pp.1-2.
[112] *The Whittlesea District*, Whittlesea Agricultural Society Publication, VA Reid, nd (c.1947)
[113] The Whittlesea District, *op cit*.
[114] Payne, 1975, *op cit*, p.94

## Rural Land Use in the North of the Study Area

The parishes of Kalkallo and Merriang had slightly less, though still significant, densities of stony rises than the Epping–Wollert area to the south.[115] However the known dry stone walls in the area are scant, principally confined to its more southerly boundaries, below Donnybrook Road, including the Medland Estate. The history of the area suggests that the explanation for this has been the different type of farming in the north, rather than the landscape.

The history of this area began in a similar way to that of the south, with sale of Crown land in large parcels, and parts of some large estates being tenanted out for small farming. Some of the notable tenant estates were the McDonald's 'Bald Hill Estate', the Kirby 'Fausley' estate, and Henry Miller's 'Springside Farm'.[116] Areas around Mt Blunt (Bald Hill, now Mt Fraser) were particularly rich, and supported Mr Gadd's flour mill at Kalkallo.[117]

However, when small farms became widely available in Victoria from the early 1850s, presumably most tenant farmers, preferring to be freeholders,[118] moved on. Although the mysterious sudden disappearance of small farming is generally attributed to the devastating 'Black Thursday' bushfire that ravaged the area in 1851,[119] this may be the explanation of the fate of the thriving 1840s Scottish tenant farming settlement of Kinlochewe (on the opposite side of Merri Creek to *Summerhill*).

There were only a very small number of reasonably sized farms available in these parts. All of the parish of Kalkallo and most of the parish of Merriang had been sold in 1840. In the parish of Kalkallo John Hunter Patterson, who had previously leased the land as part of his Green Hills pastoral estate, dominated the Crown sales, purchasing 15,000 acres, being all of the land in the parish east of the Merri Creek except for one square mile (640 acre) allotment.

In conformity with the policy of the period, the parish of Merriang was also sold in square mile (and greater) allotments, with a small number of purchasers buying many of the available allotments. These included John Hunter Patterson, J Robertson, W Lithgow, N Arrowsmith, and W Murray.

Patterson quickly realised he couldn't repay his loan, and advertised 15,000 acres of his land for sale. Apparently it was all purchased by William Forlonge who, 'conscious of his descent from the Counts of Languedoc in France and of the benefits he had conferred on the pastoral industry through his importation of Saxon sheep, had ambitions of owning an estate befitting his background.'[120] He had also overstretched his finances, but was able to sell part of the property to the Wedges; with land in Toorourrong and Morang he held on to an estate of at least 16,000 acres until 1853, when his bank foreclosed. Part of his holding was subsequently subdivided into the Medland Estate for small farming. Patterson and Forlonge both prospered later on large estates further up-country.

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[115] Map 'Rocky Knolls Distribution in the City of Whittlesea', City of Whittlesea, 2019
[116] Payne, 1975, *op cit*, pp. 48, 104
[117] *ibid*, p.103
[118] Eg, Margaret Kiddle, *Men of Yesterday: A Social History of the Western District of Victoria, 1834-1890,* MUP, Carlton, 1983, pp.226-7, refers to Port Fairy farmers becoming dissatisfied with renting. Similarly the issue of 'absentee landlordism' lingered on tenanted estates in that area.
[119] Payne, 1975, *op cit*, p.102
[120] *ibid*, p.150

Many of the large estates in the area thus went from one owner to another, as holdings were broken up and consolidated. From 1857 early squatter John Sherwin purchased Richard Brodie's large holdings, and then other estates including the previously tenanted Fausley and Bald Hills properties. He became a leader in the local community, and an MLA, at which time he 'tired of being the country squire', although his 5600 acre Braemore property remained in the family for 100 years.[121] From 1867 until 1911 WJT Clarke and his family owned many thousands of acres west and north of Kalkallo.[122] In addition to *Summerhill* Dr WH Wilson also leased other massive estates. Another consolidation created the 3000 acre Spring Vale estate, leading a local diarist to complain that Merriang was becoming 'one large sheep walk'. Local population plummeted, Merriang school closed and the township ceased to exist.[123]

The subdivision and sale of the Merriang Common in 1853 provided little benefit for aspiring small farmers.[124] It was a very large area, comprising eight 640 acre allotments, but two of these allotments were sold unsubdivided, four were divided into just two 320 acre holdings, and another, in marshy land, was divided into three. One allotment, mainly on a marshy part of Merri Creek (formerly a 'water reserve') was divided into eight smaller allotments. Most of the eight square miles was purchased by those who had previously bought large holdings in the 1840 sale, such as J Robertson and R Brodie.

While Payne records that a contemporary blamed the collapse of Merriang and Beveridge on the appropriation of the tenancies by pastoralists and the estates of gentleman farmers and aspiring Lords of the Manor, there appear to have been more fundamental influences. Firstly, the decline of tenant farming during the 1850s together with the lack of a local supply of small freehold farms. And secondly, the sudden shift from cultivation to pasture, which, says Peel, caused 'the exodus' of small farmers from the Port Phillip region, 'mainly during the years 1861-4, with the greatest movement probably occurring during 1863.'[125]

Although the opening of the North East Railway in 1872 apparently helped larger mixed dairy farms of *Spring View* and *Summerhill*, the area still didn't have the advantage of the Thomastown–Epping–Wollert area in the south, whose proximity to Melbourne enabled its small dairy farmers to supply the fresh milk market.

The farms of the Woodstock appear to have had larger acreages than the dairy farms to their south. The area attracted notable locals such as John Hunter, Henry Miller and John Mason, who built impressive bluestone residences in the Donnybrook Road area.

But in general the properties in this area were described as mixed farms supporting large families, milking, cropping and carting firewood to Melbourne.[126] During the 1860s the dichotomous system of agriculture in which grazing and cropping were kept rigidly separate, began to be replaced with the 'mixed farm', in which stock and cultivation were rotated, helping to replenish the land amongst other advantages.[127]

Over the course of its history this very attractive locality also attracted a few horse studs. Some of these built dry stone walls around stony rises.

[121] *ibid*, pp.52-3
[122] *ibid*, 106
[123] *ibid*, pp.47-56, 100-106, 150-153.
[124] Payne, 1975, op cit. p.13; Historical Plan: Merriang No.26; Historical Plan: NR122, 1857; City of Whittlesea LiDAR mapping project
[125] Peel, *op cit*, 1975, p.135
[126] Payne, 1975, *op cit*. pp.90-91, 108-111
[127] Peel, *op cit*, 1975, pp.106-107

That there were once dry stone walls to the north of Donnybrook Road is evident in an 1857 road map, which shows dry stone walls along most of Epping-Merriang Road, and a number of private walls intersecting the road as far north as the Merriang school. While some of the walls on this road survive further south, near Woodstock, no walls have thus far been identified in this northern district today. Vestiges of such walls may survive.

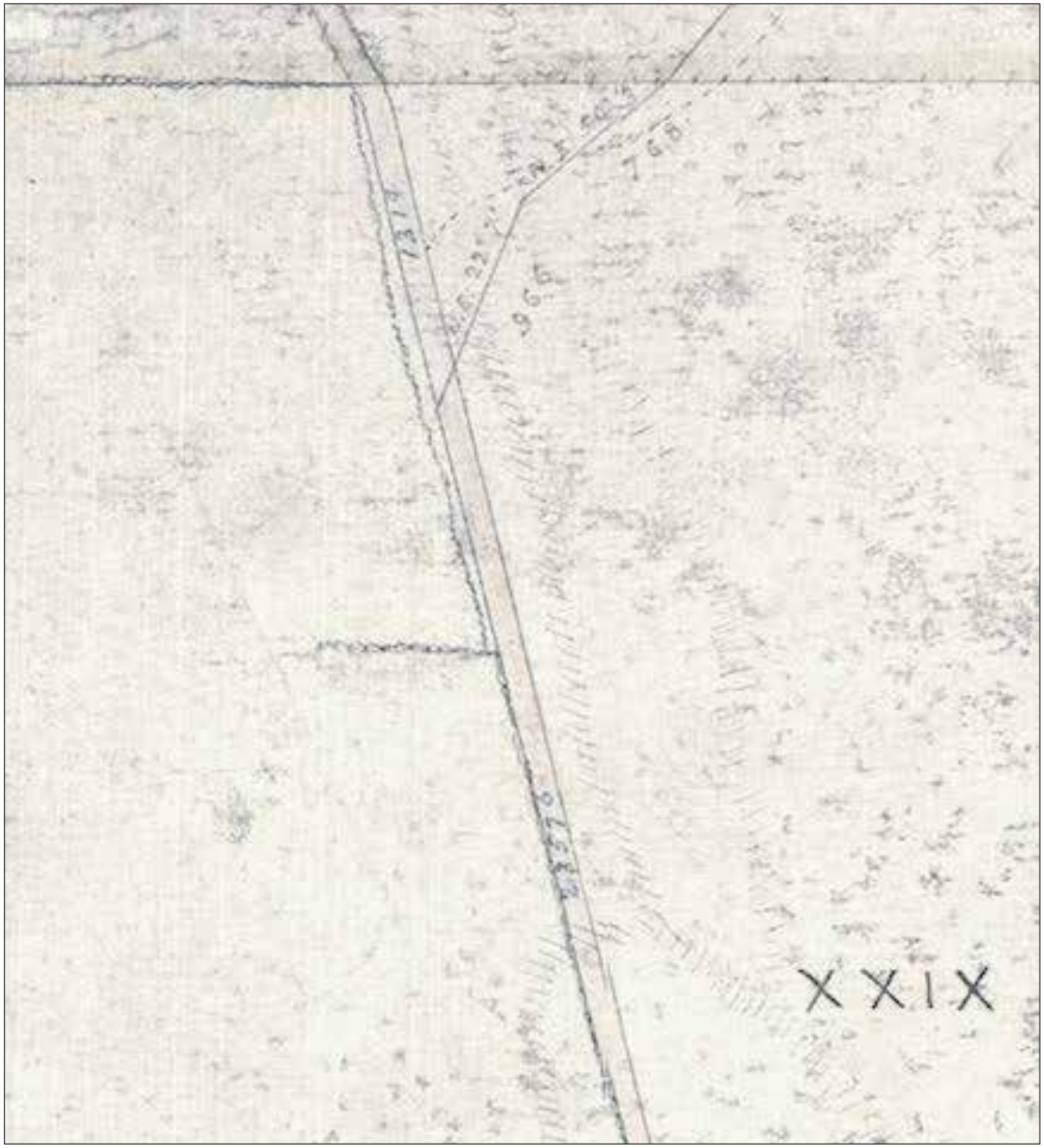


***Image 14:*** *Detail of an old part of the Merriang Road above Beveridge, showing dry stone walls on the west side of the road, and two intersecting walls. (Historical Plans: 'New Roads 122', 1857)*

# Chapter Three

## Dry Stone Walls: in Victoria, and Whittlesea

### DRY STONE WALLS IN VICTORIA

### Fencing 1850s-1870s

In 1826 rural affairs commentator James Atkinson reported that he knew of no example of dry stone walling having been erected in the colony of New South Wales.[128]

Initially squatters on vast sheep runs without security of tenure employed shepherds to look after sheep instead of erecting fences or walls. In the evening shepherds returned the sheep to folds constructed of wooden hurdles or brush fences near their outstation huts. Fences were used on squatters' home-stations to enclose the 'home paddock', to confine the precious horses, and the 'cultivation' [kitchen] and ornamental gardens, to protect them from stock. Fences were also required to separate stock for breeding purposes. These early fences were of the materials to hand: 'make-up', 'pig-sty' or 'bush' fences of unworked tree branches, 'brush fences', or vertical timber slabs or other primitive paling material, and eventually post & rail.[129]

A number of events in the early 1850s radically changed this situation. Firstly, the exodus to the gold-rushes made it difficult and expensive for squatters to retain labour for shepherding. Secondly, the extensive survey, subdivision and sale of Crown land in the early 1850s provided security of tenure and incentive for pastoralists to invest in major improvements, including permanent fences. Thirdly, Crown surveyed thousands of new small farms, which all required boundary fencing. This also encouraged pastoralists to fence their property boundaries so that stock from neighbouring farms couldn't stray across their stations. A new availability of skilled labour, including professional stone wallers, as a result of the gold rush immigration in the early 1850s and then the alluvial gold decline a few years later, were significant, as was the increasing wealth with which to employ them.

Fences and walls slowly began to replace shepherds on the pastoral estates. But these pastoral walls were scant, used only for property boundaries and huge sheep paddocks. By contrast, in the same period, farms had very concentrated patterns of walled paddocks. The creation of small paddocks were essential for mixed farming, to secure crops and gardens from stock, and to manage stock for breeding and milking.

At the beginning of the pastoral period in Victoria, common law held that generally a landowner was under no obligation to construct or maintain boundary fences, or fences adjoining a public road. However, as a result of Australia's rapidly expanding pastoral and agricultural industries, trespass and theft of stock, and the spread of devastating diseases such as sheep catarrh and cattle pleuro-pneumonia, fencing began to be prescribed in legislation. Victoria's *Fences Statute 1865* gave landowners the right to claim equal contribution towards the construction or repair of boundary fences from the owners of adjoining lands.[130] Victoria's *Fences Statute 1874* made fencing subject to much more comprehensive legislation governing the obligations of adjoining landowners with respect to dividing fences.

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[128] Kerr, JS, 'Fencing, a brief account of the development of fencing in Australia', *Australasian Society for Historical Archaeology Newsletter*, Vol. 14.No.1, March 1984, pp.9-16.
[129] Kerr, *loc cit*; Allan Willingham, 'The Dry Stone Walls in the Corangamite Region: A Brief History', in Corangamite Arts Council Inc, *If These Walls Could Talk, Report of the Corangamite Dry Stone Walls Conservation Project*, Terang, 1995, p.44
[130] Lawlink: New South Wales Law Reform Commission website: 'Report 59 (1988) – Community Law Reform Program: Dividing Fences'; Parliament of Victoria website: Law Reform Committee, 'Review of the Fences Act 1968'

Internal walls cleared the land of stones and made it more productive. As with boundary walls their construction is likely to have commenced very soon after occupation. The construction of early 'cultivation' paddocks may have preceded boundary walls. Most dry stone walls would have been built between the 1850s when extensive Crown land sales provided security of tenure, and the 1880s when plain and barbed wire became widely accessible.[131] But in some areas dry stone walls continued to be built into the twentieth century, especially where it was difficult to plant fence posts.

## Walls and Fencing in Nineteenth Century Victoria

The first statute to specify the types and dimensions of fences deemed to be 'sufficient' was the 1874 Fences Act. Although most of the study area walls would have been built considerably before this, the statute's description of 'sufficient fences' is instructive of the practises of the period.[132]

In addition to being a minimum of 4 feet (1220 mm) high, a stone wall used as a dividing fence had to be of 'not less than 2 feet [610 mm] wide at the bottom', and '9 inches at the top' (230 mm). Although the specifications for road boundary fences were not given (the Crown being exempt from the regulations), it could be expected that the walls on these public boundaries would be at least as high as those that divided neighbours.

Other 'sufficient fences' described in 1874 include: 'post and rail' (which had to be a minimum of three feet six inches high); The fences it describes include 'post and rail', and a 'bank or wall of substantial materials'. A post and rail fence had to be a minimum of three feet six inches high; a 'paling' fence (minimum 3'6" high); a 'wire' fence (minimum 3'6" high); 'a bank or wall of substantial materials' (minimum 4' high); 'a close hedge or live fence' (minimum 4'6" high); a 'logs and chock fence' (minimum 4' high); 'a combination of any of the abovementioned fences' (minimum 4' high); and several variations of ditches and fences, and finally natural watercourse boundaries.

*Dry Stone Walls*

The high walls (some of them 'rabbit walls') built in the Western District from the late 1870s until the 1890s[133] are probably the best known examples of dry stone walls in Australia. The Western District walls are in fact exceptional, of greater average overall height and length and number than anywhere else in Australia. The blocky and relatively uniform shapes and vesicular texture of that area's stones create friction and stability, and closely packed wall-faces into which plugs could be firmly hammered. Other unique variations include overhanging copestones (sometimes with projecting palings) and deep trenches attempting to keep the rabbit plague at bay. They are characterised by their high level of finish, both in terms of tightly positioned and evenly coursed stones, careful plugging of the gaps between the stones, and well-packed copestones.[134] The stone of the Western District, which enabled such high walls, is very different to the heavy round stones that characterise Melbourne's western and northern fringes.

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[131] Matic, A, Vines, A, 'An Archaeological desktop study of the proposed Edgars Creek Drainage Scheme, Epping, Victoria', Biosis Research, June 2006, p.37
[132] The Fences Statute 1874 (Fences Amendment Act, November 1873), Clause 4 (i-xi). Other types of early fencing are described in Michael Cannon's *Life in the Country: Australia in the Victorian Age: 2*, Nelson, West Melbourne, 1978, pp.89-90; and Graham Condah's *Of the Hut I Builded*, Cambridge University Press, Melbourne, 1988, p.89.
[133] Willingham, *op cit*, pp.17, 48-51
[134] Vines, 1995, *op cit*, p.59

Lacking interlocking, and often surface friction, the round stones of Melbourne's northern and western fringes were never the ideal building material. The author of the 1848 *Rural Cyclopedia* considered round stones objectionable 'as they are ever rolling off'. The small wedge stones which held these round stones in position were easily dislodged.[135] Similarly, the 'round stone fence' surmounted by turf was described in Loudon's 1857 guide to British agriculture as a 'very indifferent fence', whose only apparent benefit was that it cleared the land of stone and could be built by labourers. It was found to be unstable when built to a standard wall height. Stock could easily dislodged its copings, and 'great trouble and expense are annually required to keep it in repair.'[136] Despite such textbook dismissals, some sturdy walls of very respectable height have been built with such stone by carefully selecting and coursing stones, and by using copestones and extensive plugging.[137]

Walls were built across Victoria's volcanic plains. A dry stone wall (or 'wall', as referred to in the Fences Act) was the best solution where 'stone was abundant, timber scarce, transport of fencing material expensive, skilled labour available, and where cheaper alternatives were unavailable.'[138] From about the mid-late 1850s, when freehold ownership burgeoned and the price of labour declined, and through the early 1860s when the price of labour remained cheap, the labour-intensive construction of stone walls remained very competitive.

Walls were built wherever stony ground made them possible, or necessary. Although by 1874 wire fencing was already much cheaper than the construction of a good stone wall, stone wall construction remained popular with farmers with stony ground. A common reason for preferring dry stone walls was the need to clear stony land to enable cropping and grazing (dairying), and the availability of family labour with which to build them.

The 1874 Fences Statute's specification that walls be a minimum 4 feet (1220 mm) high, and with a base of not less than 2 feet (610 mm) wide at the bottom was in accordance with traditional construction of the period. The 1848 *Rural Cyclopedia* had specified an overall height (including cope stones) of 4 feet 3 inches (1300 mm), with a base of 2 feet 6 inches (760 mm).[139]

Historically, this 4 feet 3 inches was deemed the 'average paddock height' for which tenders were called in sheep country.[140] It is usually held that walls in cattle country were built higher than sheep country 'to discourage the cattle from leaning over to reach greener pastures and dislodging coping stones'. In the Western District 'walls enclosing cattle were generally at least 1400 mm (4 feet 7 inches) high'.[141] This also seems to have been a standard applied on the Keilor-Melton plains, where high walls, presumably for cattle, on Mount Kororoit Farm are 1400 mm in height. Many dairying walls in the Western District are higher. For example, Perkins reports walls of 1680 mm (5 feet 6 inches), and McLellan notes 'fine, taller walls' up to 2130 mm (7 feet) high to stop the cattle leaning over and dislodging stones.[142] Exceptionally high walls were built for stallion or bull yards.

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[135] Willingham, *op cit*, p.41
[136] Loudon, JC, *Encyclopaedia of Agriculture*, 5th Edition (Longman Brown Green Longmans and Roberts, London, 1857), p.496
[137] Corangamite Arts Council, *op cit*, p.28
[138] Vines, G, 'Comparative Analysis of Dry Stone Walls in Victoria, Australia and Overseas', in Corangamite Arts Council, 1995, *op cit*, p.56
[139] Willingham, Corangamite Arts Council, *op cit*, p.41.
[140] Corangamite Arts Council, 1995, *op cit*, pp.49, 113
[141] Corangamite Arts Council, 1995, *op cit*, pp.17, 21
[142] Nathan Perkins, in Corangamite Arts Council, *op cit*, p.130; Rod McLellan, 'The Dry Stone Walls of Victoria's Western District', *Historic Environment* Vol 7 No 2, 1989, pp.28-32

*Post & Rail Fencing*

Three feet six inch post & rail fences are said to have been the most common early fence type in Australia.[143] Together with paling fences they were popular due to the relative prevalence of forests and woodlands across Victoria. Land for grazing was generally enclosed with three rails, but smaller settlers contented themselves with a two rail fence. Similarly, large enclosures intended for horned cattle or horses were frequently enclosed with two rails only if timber was scarce.[144]

Historical data from the nearby Melton-Sunbury area suggests that, although in stony land, in the 1850s to the 1870s the large pastoralists there had far more post & rail fencing than dry stone walls.[145] William Westgarth also recounts that in 1854 he 'struck west through post and rail fences onto the Keilor Plains'.[146] Although farmers in that part had superior Grey Box forests in the vicinity, and the plentiful timbers of the Macedon Ranges a little further on, they were also conscious of the loss of post & rail fencing in the bushfires that always threatened.[147]

*Post & Wire Fencing*

The inclusion of 'wire' fences in the 1874 fences statute is significant. Wire fencing, introduced during the gold rush years, held great promise in areas where natural timber and stone were scarce. The excessively thick and soft 'black bull wire' was gradually substituted by thinner and stronger galvanised steel wires, meaning fence posts could be planted much further apart (usually about 30 feet), supplemented by for or five 'droppers' between each post to keep the wire stable.[148] The system found widespread application throughout Western Victoria in the 1870s and 1880s as wire fencing manufacturers at home and abroad made substantial improvements in the production and cost of wire, timber posts, and the associated winding and straining devices.[149]

Originally the rural rule of thumb had been 'post & rail for cattle' and 'post & wire for sheep',[150] but with the invention of barbed wire in the 1870s and its widespread use in Victoria during the 1880s, cattle as well as sheep could be kept safely behind the wire, and fewer strands used.[151] This innovation had a major impact on the construction of new dry stone walls, and the repair of existing ones.

*Composite Dry Stone Walls*

Another conventional fence listed in the 1874 Fences Statute was the 'combination' or 'composite' fence amalgamations of standard types. They are also called 'half-walls'. These include fences constructed partly of stone walls and partly of post & wire, or post & rail, or post & rail & wire. They were sometimes planted with hedges.

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[143] Eg, Morris, G, 'Centennial History, Werribee', extract obtained from *Werribee Banner*, 5th April 1962]
[144] Kerr, *op cit*, pp 9-16
[145] Map, 'Index of Fences' on John Aitken's Mount Aitken property (after Crown Land sales). PROV 460/P0/39365; Beattie, Steward K, *The Odd Good Year: Early Scots to Port Phillip, Northern Australia, Gap, Gisborne and Beyond*, Southwood Press, Marrickville, 1999, p.63
[146] Lack, J, Ford, O, 'Melbourne's Western Region: An Introductory History' Melbourne's Living Museum of the West Inc, Melbourne Western Region Commission, 1986, p.27
[147] Chandler, J, *Forty Years in the Wilderness*, Loch Haven, 1990, p.174
[148] Cannon, *Life in the Country*, Thomas Nelson, West Melbourne, 1978, pp. 89-91
[149] Willingham, *op cit*, p.46
[150] Kerr, *loc cit*
[151] Cannon, 1978, *op cit*, pp.89-91

Composite dry stone walls are the most widespread type of wall in Victoria, and are particularly prominent on Melbourne's western and northern fringes. In Britain, where prototypes are discussed in early literature, and elsewhere in Europe and Asia, they are thought to be uncommon if not unknown. They are known in New Zealand and the United States.[152] Their local prevalence raises the debated and as yet unresolved question as to whether, and which ones, were purposively constructed in this manner, and which ones have been modified, or retrofitted, with post & wire or rail.

Experiments with combining fencing materials to most economical effect were undertaken early in Australia. Unable to afford more than two-rail timber fences, in 1827 one farmer reported on 'an excellent fence' that could be made by filling the space underneath the lower rail with turf. Squatters were also experimenting. In 1851 John Learmonth and his neighbour William Lewis of Terinallum in the Western District erected a boundary fence in which the lowest rail was replaced by a stone dyke (or wall).[153] It appeared to Learmonth: 'that in some part this would add little to the expense, and at the same time would add to the durability and safety from fires.' In November 1856 the McDonalds of Stonyfield petitioned George Russell to fence their mutual boundary with a 'split rail fence and double stone dyke'.[154] An 1861 treatise on fencing by a Scottish manufacturer includes diagrams showing wire fencing on top of stone walls.[155]

The construction of half stone walls then occurred very early, influenced by cost as well as the availability of fieldstone. Kerr identified the half-wall half-fence 'tradition' in the Western District, and also at Coswell near Swansea in Tasmania, 'where rock-pile walls or dykes form the base storey for both post and wire and modified cockatoo fencing.'[156] There is a record of a wall constructed at Turkeith near Birregurra in 1927 with: 'two foot walls with cope stone on a 2'6" base, with barb wire.[157]

The fact that composite fences are mentioned in the 1874 Fences Statute tells that composite stone and wire fences were being deliberately built in the nineteenth century.

On the other hand, we know that many of today's composite walls are the remnants of original all-stone walls that were later repaired by part-demolition and incorporation of post & wire fencing, or else just built up to a 'workable height' by the addition of post & wire fencing.[158] Mitchell, apparently citing retired waller Len Breen, states that 'Stone walls … have since been electrified or had post and wire worked into their construction'.[159] One wall identified in the Moorabool Shire is known to have been built c.1870, and had post & wire added after 1908.[160] All-stone walls near Cobbledick's Ford Tarneit are known to have been professionally modified to composite stone and post & wire walls in the post-war period.

[152] They might then be of potential significance as a particular, even indigenous, 'type' of wall in Victoria, or in the 'New World', but this question is unable to be answered at this stage, or considered in this study.
[153] Kerr, *op cit*. (Dyke was the Scottish word for stone wall.)
[154] Willingham, *op cit*, p.48
[155] *ibid*, p.46
[156] Kerr, *op cit*.
[157] Mary Sheehan (author of Colac Otway Heritage Study), email 11th August 2005
[158] Vines, 1995, *op cit*, p.60
[159] Mitchell, H, 'Building Dry Stone Walls', *Grass Roots*, No.48, April 1985
[160] Richard Peterson, Daniel Catrice, 'Bacchus Marsh Heritage Study', 1994

It is likely that many, probably the majority, of 'half-walls' were constructed because of limited availability of fieldstone. This is the only explanation Western District farmer Winston Whiting has been able to find for the fact that, of 3 miles of all-stone farm boundary fencing constructed by his father, half a mile is 'normal fencing' with 'stone foundations'.[161]

Peel puts the simple and primary reason for the construction of composite walls succinctly:

> 'With increasing distance from a timber supply, less timber was used in fence construction and wire fences, or stone walls in the stony country, became more common. Again, where less stone was available, stone walls and wire fences were combined, with the stone wall portion consisting of anything from a single row of stones to a substantial wall three or more feet high with only one or two wires on top.'[162]

For example, says Peel, timber for the Sunbury vicinity was sourced from the Mount Macedon area, but as Sunbury was also at the edge of stony country, split timber, stone and wire were all used, commonly in the same fence.[163] And, as Vines has shown, the 'combination' fencing is also common on the Keilor and Werribee plains.[164] One reason for part-stone part-wire fences of the Melton Shire study area relates then to the quantity of stone in the area. The 'rabbit plague' was another. The strongly clay soils of the area made it difficult for rabbits to burrow, and encouraged them to inhabit dry stone walls instead. As reported in the *Bacchus Marsh Express* on 15 March 1890, ST Staughton was in the midst of ripping out 50 miles of all stone walling on *Eynesbury*, replacing them with a 'six wire fence with one course of large stones underneath to bottom wall'. There are numerous such composite fence-walls, usually with a few neat courses of stone, still to be seen around Melton.

While no extensive dry stone walling country is known to have been sold in Whittlesea under the Selection Acts,[165] an analysis of 21 Selection Act files in an area between Sunbury and Melton confirms that 'post & wire and stone' composite walls were being built regardless of conventions or statutes. The printed forms upon which selectors were asked to mark the improvements to their properties included 11 types of fences. None of the options was for what is now the most common type of fence in the district: the composite 'post & wire & stone' (or 'post & rail & wire & stone') fences. Yet at least 5 of the 21 selectors describe these types of fences on their official selection statements, marking additions such as 'stone bottom' to the 'post and wire' category. It is likely that the lack of a category for this type of wall meant that others again (in addition to these five) simply selected one of the given types to describe their composite walls; some probably called their 'half -stone' fences either 'stone walling' or 'post & wire' or 'post & rail' fences. The price of the different type of walls recorded would support an estimate that some 30% of the fencing built by these selectors was in fact post & wire and stone, despite this category not being officially acknowledged.

These variant walls may have been particularly associated with Melbourne's western plains, but it is likely that they were also built in other places with similar permutations of stone, other fencing materials, and labour.

A minority of apparently 'composite' stone walls are definitely not so. Sometimes stone 'floaters' would be gathered from paddocks as they appeared, and stacked under fences, making a rubble stone fence, rather than a professionally built 'half-wall'. One Melton farmer remembers that prior to sowing a crop, the men would take the horse and dray and pick up stones and place them along and under the post & wire and post and rail fences on the property.[166]

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[161] Corangamite Arts Council, *op cit*, p.80
[162] Peel, *op cit*, p.108
[163] Peel, *op cit*, p.108.
[164] Vines, G, *Built To Last; An Historical and Archaeological Survey of Dry Stone Walls in Melbourne's Western Region* Living Museum of the West Inc, 1990.
[165] A number of allotments were reacquired in the early twentieth century by the Crown under Closer Settlement and Soldier Settlement legislation. It is unlikely that any new dry stone walls were built in this late period.
[166] Mary Tolhurst, personal conversation, February 2002.

## Dry Stone Walls in the Twentieth Century

The main period of construction of dry-stone walls in Victoria was in the period 1850-1880, after which improvements made wire fences considerably more economical than stone walling.

The norm in twentieth century Victoria was to remove or partly remove stone walls to rearrange paddocks to accommodate large new farm machinery, to facilitate maintenance, and to clear vermin (especially rabbits).

During the 1930s-40s some farmers sold their walls to contractors with travelling stone crushers who reduce the walls to aggregate for roads.

Especially in the vicinity of Melbourne, on weekends rabbiters arrived by train or bike, often with ferrets. Walls were progressively weakened as they dislodged stones in search of their quarry. Many farmers scheduled wall repairs on Mondays.[167]

However, some new stone walls continued to be built, and existing stone walls repaired, into the twentieth century. Where new farms, in particular dairy farms, flourished, walls continued to be built as long as labour was available, land had to be cleared, and stones were plentiful. This was notable in the Western District stony rises areas, where traditional walling skills had been retained.

Although construction of walls in this period was an exception, many nineteenth century walls evidently survived due to a wider view in rural Victoria that dry stone walls offered protection against grass-fires. A rule of thumb was that each foot in height of a wall was equivalent to a 5 foot plough break.[168] Others valued their benefit for sheltering stock from wind.[169]

# DRY STONE WALLS IN WHITTLESEA

## General Distribution of Walls

Two City of Whittlesea maps have been foundational in this study.

The first is the 'Dry Stone Wall Map', compiled primarily from LiDAR data (Image 15). The inevitable gaps in this map will progressively be addressed with ground-proofing. Some walls are as yet unrecorded, particularly at the extremities of the primary dry stone walls study area.

The second is the map of 'Rocky Knolls Distribution', which is complete for most, but not all of the dry stone wall areas in the district. (Image 3)

[167] Eg, Trevor Davis, personal conversation, 5th November 2019
[168] John Morton, Mt Cotterell, personal conversation, 19th July 2006
[169] Gerald Moloney, in Corangamite Arts Council, *If These Walls Could Talk, Report of the Corangamite Dry Stone Walls Conservation Project, Terang, 1995*, pp.83-84

As expected, there appears to be a good general correlation between the distribution of rocky knolls and dry stone walls.

The dry stone wall mapping shows comparatively few dry stone walls mapped in the north and south of the dry stone walls study area. The mapping shows generally three zones, the north and south ones of which are comparatively devoid of stone walls. Some possible explanations are:

- North of Donnybrook Road, in the Beveridge Merriang area:
    - for most of its history this area has been used for sheep and cattle grazing, rather than farming. The one or two long straight walls in the area, either property or large paddock walls, would reflect this historical land-use.
    - A relative scarcity of rocky knolls in the north east part of the area, east of the Merri Creek, in the originally marshy headwaters of the Darebin Creek, which was referred to historically as the 'Merriang plains' (or the 'pleurisy plains').
    - However the area's history of small farming in the very early era; the presence of rocky knolls in this area; and the evidence of stone walls in Donnybrook (eg the cemetery) suggest that there might yet be some remnant dry stone walls in the area nearer the Merri Creek that are as yet unidentified.
- Central Area: Wollert, Epping, Woodstock.
    - This area has the most intense distribution of dry stone walls.
    - While parts are situated in reasonably dense areas of rocky knolls, clearly the main reason is the intensity of small farming that occurred in the area. It coincides with the smaller parcels of farming land sold in the 1850s.
    - The sparse, large grid form of walls in the western part of this area express the very early (1838) alienation of this land, the large properties in the area, and its primary historical use for grazing. Pockets of landscape-shaped walls, some apparently for cultivation paddocks, suggest the presence of some dairy farming.
    - In the fresh-milk district to the east were precincts of very high density dry stone walls.
    - While it is clear from the 1930 Ordnance plan that a good number of walls were lost in the following decades, enough remained by 1990 to be highlighted in the first heritage study of the area. Many walls have since been lost in the ongoing suburbanisation of this area.

- South of Craigieburn Road East:

    - As a result of the Wakefieldian-era land alienation in 1838, most of this land was in absentee ownership, and never closely developed during the nineteenth century when most dry stone walls were built. As such, there were never high concentrations of dry stone walls in this region. Even fewer remain now, as urban related development – for quarries, factories and new suburban subdivisions – have already made significant inroads into this district. The recent reservation of land for Craigieburn and Cooper Street grasslands include some walls; most of these are in very poor condition, partly due to their long disuse, and possibly also their great age.

    - Dating dry stone walls can be especially difficult, particularly for very early periods. As with all built heritage, walls from the pre gold-rush period walls are rare, and no confirmed examples are known. However we are certain that walls were built in 1850 in the study area, in Westgarthtown. It is very likely (see the 'Early Farming Precinct', Chapter 4) that some walls were built in this district of Whittlesea following the 1838 Crown Land sale, and in particular, after the 1840 'Argyle' subdivision. Some of the 'freeform' landscape-formed dry stone walls identified in the mapping might provide evidence of this early era, or later, small farming.

    - However, for much of its European history the area has been associated with large dairies, and the fencing (including walls) associated with that would have been very low density, the long straight walls associated with lease boundaries or large paddocks. A few such walls are mapped, and field-work may reveal the vestiges of others.

- Isolated Walls:

    - Especially in districts where dry stone wall construction was sparse, but sometimes due to destruction of surrounding walls, there are walls that are outside prospective precincts.

    - Many important road boundary walls are in this category. Other examples include farm complexes, including cultivation paddocks, relatively isolated due to the larger than average size of a property, or perhaps because a particular farmer has had a preference for or skills in dry stone wall construction.

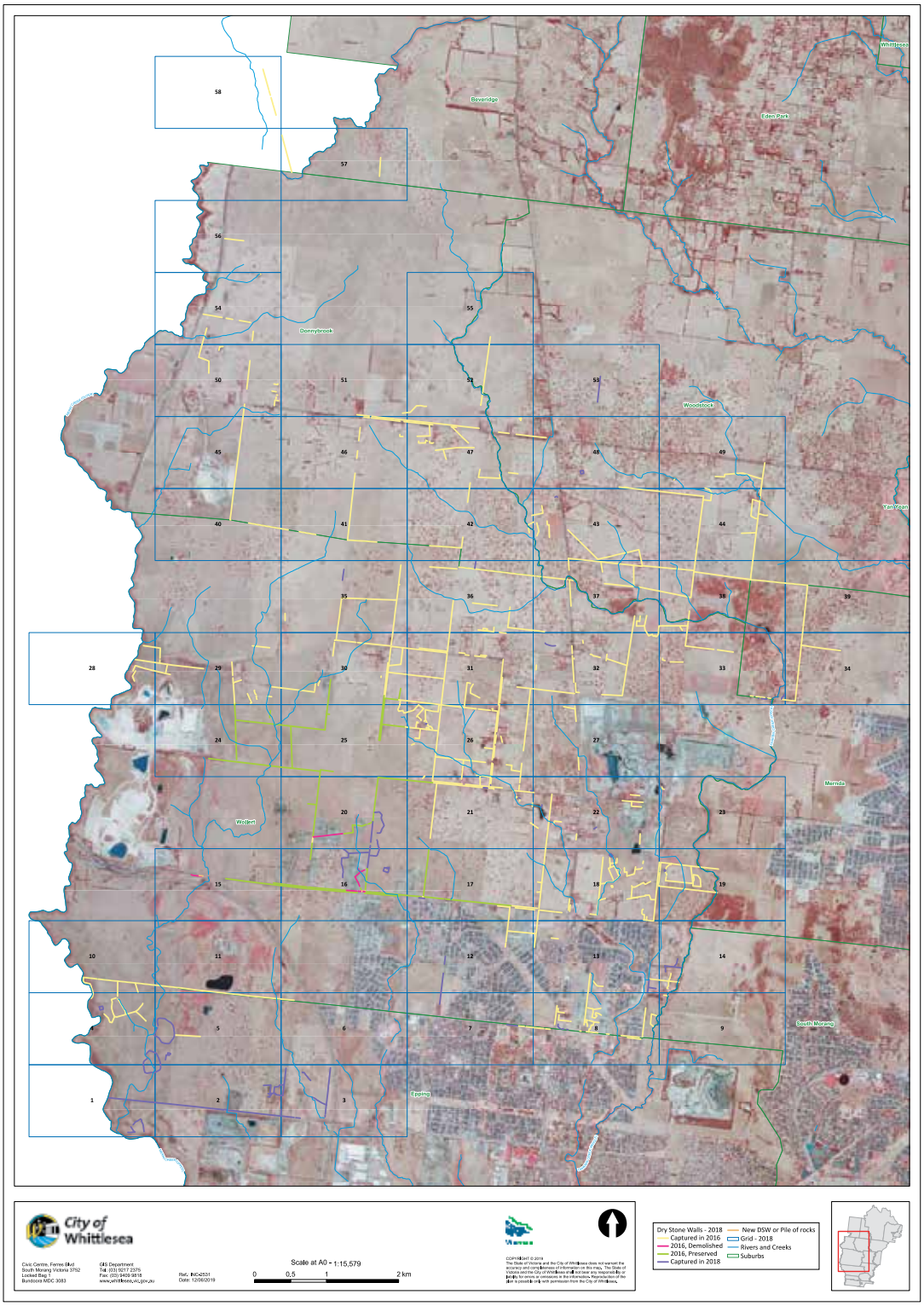


***Image 15:*** *City of Whittlesea LiDAR Dry Stone Wall Map, as at June 2019. Those marked in yellow, light green and purple are extant. Additional walls, some outside the boundaries of this map, will be identified as ground-testing continues.*

## Characteristic Construction of Whittlesea Walls

As in other Melbourne fringe areas, the stone in Whittlesea is generally round and dense and much more difficult to build with than the flatter vesicular stones whose friction gives walls in the Western District stability and maintains their vertical structure.

While good walls can be built with rounded stones, and there are some quite extensive lengths of reasonably intact walls on Melbourne's western plains – often the professionally-built boundary walls of the large nineteenth century pastoral estates – these are exceptions. The typical condition of most walls west and north of Melbourne is low and 'pyramidal' as a result of the poor structural material and the cracking clays, upon which heavy loads sink and spread (or 'explode'), collapsing the walls. Vines identifies these walls near Melbourne as comprising a reasonably distinct regional style quite different from either interstate examples or the Western District walls. Other characteristics of this regional style are uncommon coursing, large coping stones, and little close plugging of walls.[170]

However, as a result of the stony rises landscape of the area between the Merri and Darebin Creeks, the Whittlesea walls are distinct in several additional respects.

Firstly, as previously noted, the stony rises provide a strong foundation for walls, which preserves their stability and condition. This difference is regularly visible (although often obscured by the height of grass on the verge) on road boundary walls as they pass from soft ground over a stony rise. The different condition of the walls on these different foundations is conspicuous.

Although the unconventional construction of many walls in Whittlesea suggests that they were built by the landowners (farmers) rather than by professional wallers, most walls constructed on stony rises include sometimes substantial lengths whose height and condition is intact or near-intact. Despite inconsistencies in condition over the lengths of walls, the representation of near-vertical walls imparts a striking and distinctive aesthetic character to the dry stone wall landscape of the Merri-Darebin Plains. Jeffrey family lore tells of a gang of Scottish wallers offering to build walls (presumably boundary walls) probably in the 1850s,[171] and it is also known that professional wallers were engaged on some larger Epping–Woodstock farms in the late 1880s. They would very likely have been employing orthodox techniques.

Such lengths of wall also provide a rare comprehension of the original construction style, and a guide to repair and reconstruction of other parts of the walls.

Secondly, the stone used in Whittlesea walls is distinctive, and in consequence so is the form of many of its walls:

- The local basalt is heavy, although vesicular to various degrees. Most walls appear to combine both surface-stone, and stone that has been prised from the surface outcrops of the stony rises. This stone is fractured and often includes both flat angular and rounded planes. Rocks on top of the stony rises often had flat bottoms,[172] with natural fractures that readily split, so there was at least one flat side, enabling the lower parts of walls to be built with a more vertical and smooth batter than many other walls in the Melbourne's western regions.

[170] Vines, G, 'Comparative Analysis of Dry Stone Walls in Victoria, Australia and Overseas', in Corangamite Arts Council, 1995, p.58
[171] Mrs Marjorie Jeffrey, personal conversation 12/4/2022.
[172] Paul Schultz, personal comment, 15th March, 2013; Borrack, 1988, *op cit*, p.31 regarding 'platey structure' leading to horizontal joints.

- Heavier and rounder basalt 'floaters' have also been used, usually as copestones. Through-stones and plugging are not obvious.

- Most conspicuously, Whittlesea walls regularly incorporate oversize (c.600-700 mm high), sometimes massive (c.700-1000 mm high) stones in their base or foundation level. The frequency of these boulders is far greater than occurs in walls elsewhere, certainly elsewhere in Melbourne's western volcanic fringe areas. These large stones are a direct consequence of grubbing stone from the tops of the stony rises, and using and sometimes splitting boulders on or near their surfaces. These sometimes massive and awkwardly shaped stones add to the difficulty of building conventional coursed and interlocked double walls. They are regularly positioned on their narrow edge, as faces of a 'double wall', which makes cross-section interlocking impossible. Similarly, conventional coursing and lateral interlocking is disturbed. Occasionally these stones sometimes span the whole width of the wall, immediately upsetting conventional 'double-wall' construction above.

- As a result of the lack of interlocking with the awkward shaped stone, which is usually more dense than vesicular, structural stability depends to a significant degree on mass and weight rather than friction. This mass is mostly achieved by a noticeably, sometimes conspicuously, wider base than elsewhere, certainly in the walls of Melbourne's western volcanic fringe areas.

- The cracking clays of the volcanic areas swell and shrink with moisture content, causing the bases of the heavy walls to gradually sink and spread, destabilising the structure. Walls built across low or wet areas have invariably tumbled down. In contrast, as can be seen across the study area, the firm foundation of a wall crossing a stony rise will invariably preserve its original form.

In spite of the challenges these materials presented to builders, a reasonable degree of orthodox constructional stability and uniformity in appearance was achieved by using heavy, uniform-sized round floaters for the coping (top course), which were closely packed to tighten the walls.

In the western district the practise of using a 'shiner' – a stone placed on edge instead of being laid flat – was shunned, as this led to tipping and tilting. However the extent of Merri–Darebin walls in very good condition shows the technique of local non-professional wall builders to have been largely successful where a firm foundation was available.[173]

While not all walls are of this type, a high proportion (perhaps 50%) of Whittlesea walls appear to feature oversize or massive foundation stones surrounded by smaller stones (often still medium to large in size) in 'rubble' construction, rather than the roughly coursed archetypes of UK tradition. The distinctive masonry of this characteristic Whittlesea wall, with massive stones surrounded by rubble stone, could be described as 'cyclopean' in style.[174]

[173] The practise of laying stones on their narrow edge may only have been used for the parts of walls built on the firm bases of stony rises. It is difficult to tell this, as larger flat stones may be buried under lengths of wall that have spread and tumbled down.
[174] This contrasts with the City of Melton, where only one wall of comparable construction was found: some 500 metres on the north side Sinclairs Road between Kororoit Creek and Neale Road. This construction style, together with the colour of the stone, contrasted with the shorter and orthodox wall on the opposite side of Sinclairs Road. The stone for that cyclopean wall may also have been quarried, in that case from outcrops on the banks of Kororoit Creek.

- Height

  While the 1874 Fence Statute required stone walls to be a minimum of 4 feet (1220 mm) high, most walls in Victoria appear to have been built to a minimum 4 feet 3 inches (1300 mm), with many built to 1400 mm, with those 'fine, taller' walls much higher again.

  However in the 1880s stone walls built in the Thomastown–Merri Creek district by JS Morgan were built only to the four foot (1220 mm) 1874 Fences Statute minimum. In 1887 the travelling reporter to Morgan's major dairy property noted that: 'Stones are plentiful in the district and walls are common, the cost of erecting a 4 feet fence in height being about 23 shillings a chain.'[175] This suggests that while 4 feet 3 inches was the accepted height of the western district 'sheep wall', 4 feet was sufficient height for docile dairy cattle.

  In the same period the farm of Joseph Cotchin, on Epping Road south of Woodstock, was fenced primarily with dry stone walls (and also post & rail fencing, which was available from the extensive open redgum woodland of this locality). Cotchin's stone walls, also built for dairy cattle, varied in height from 4 feet 3 inches (1300 mm) to 4 feet 6 inches (1370 mm).[176] These are more comparable to those on the Keilor-Melton plains, but nowhere near as high as most of those in the Colac-Camperdown Stony Rises, suggesting perhaps that it was not only the type of stock being contained but the availability of stone in different regions that influenced wall height. The cost of building Cotchin's 4'3'' – 4'6" walls was 25-30 shillings a chain, compared Morgan's 4' walls, which were 23 shillings a chain.

  Most of the apparently more intact sections of dry stone walls surviving in Whittlesea (on the tops of stony rises) appear today to be some 1000 – 1300 mm high.

- Width

  In terms of width of local walls, the observations of Whittlesea resident and historian Rob Wuchatsch is that 'most, if not all' of the walls in Whittlesea were wider than the 1874 Fences Statute's prescribed minimum of two feet (610 mm) at the base.[177]

  This corresponds with field-work undertaken on specific sites in which the base widths of all-stone walls has been carefully recorded:[178]

    - Bindts Road (750 – 1300 mm)[179]
    - Epping Road Wollert (900 – 1500 mm)[180]
    - Bridge Inn Road, Wollert (800 – 1500 mm)[181]

[175] *The Leader*, 12th November 1887, p.11
[176] *The Leader*, 16th June 1883, p.10
[177] Rob Wuchatsch, email correspondence, 29th May 2019
[178] Not all of the dry stone wall archaeological studies of sites in the City of Whittlesea have been reviewed at this stage; there are likely other studies that have made careful measurements of wall dimensions.
[179] Paul Pepdjonovic, 'Dry Stone Walls Conservation Management Plan: Epping North Pipelines, Bindts Road Wollert', MJF Constructions Pty Ltd, 9th November 2017
[180] David Moloney, 'Dry Stone Wall Management Plan, 220 Epping Road, Wollert', 9th December 2011, *passim*
[181] David Moloney, 'Dry Stone Wall Management Plan, Hanson Quarry Site, south side of Bridge Inn Road', 15th July 2013, *passim*

- O'Herns Road, Epping (1000 mm)[182]
- Wuchatsch homestead, Westgarthtown (1000 – 1600 mm; 'typical' assessed at 1100 mm)[183]
- 130 & 150-152 Bindts Road Wollert: (800 – 1100 mm, for DSW-4, the most intact wall).[184]

The best preserved walls in the above sample of studies, all having been built on solid stony rises, appear typically to be 750-900 mm wide at the base.

In many cases the wider measurements at the base are the result of walls sinking and spreading on softer ground or expanding / contracting clay bases; such change is often evident in the variation of wall base widths along a single fence. However, even where walls are built on earth rather than rock, often very large, firmly implanted foundation stones provide an apparently original hard edge. Most of these have bases in excess of 1000 mm wide, with some regularly c.1200 mm wide, and a few measured at 1400 mm.[185]

While this present sample is quite small, and mostly confined to the Wollert district, the findings appear to be consistent with observations and measurements of other walls in the study area. They appear representative.

These findings regarding Whittlesea walls, of widths on stony rises of c.750-900 mm, and on earth of c.850 – 1200 mm (and not uncommonly 1400 mm or more). Orthostat walls are often 1000-1100 mm wide at the base. These figures seem to be wider than those identified from comprehensive studies of dry stone walls conducted for nearby municipalities on Melbourne's volcanic fringe. The City of Melton heritage study found that, although many were wider, having spread, as originally constructed most of its walls had a base width of 700-800 mm.[186] Similarly, while in the City of Wyndham the Fences Statute of 610 mm is said to have been modified 'to allow much wider base walls', the 'characteristic' base width for dry stone walls, informed by the recent Wyndham dry stone walls study, is given as 800 mm.[187]

Further data and future detailed investigations will increase our understanding. But clearly one factor in this apparently distinctive feature of Whittlesea walls is the type of stone used. Many of the walls in this stony rises country use a base of oversize, sometimes massive stone, prised from stony outcrops, which are wider than usual, and which are of a height that impedes conventional coursing construction techniques, which means that strength is more a factor of mass and weight than in the conventional interlocked wall construction. A wider base, sometimes necessitated by the large base stones, positioned either across a wall or on their narrow edge, would at the same time contribute to a wall's mass and strength.

Many conventional 'double' walls have been topped up with post and a few strands of wire as they have deteriorated over time. However purpose-built stone and either post & rail or post & wire fences, of which there are quite a few in Whittlesea, are a distinct type of wall (see 'Composite Dry Stone Walls', below). Their base widths are much narrower, as they need to support a much lower stone height.

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[182] David Moloney, 'Heritage Assessment of Clonard, 275 O'Herns Road, Epping', October 2009, p.44. This is the boundary wall only, the internal walls have spread much wider. A section of was narrower (115 mm), as typical of purpose-built composite stone and post & wire fences.
[183] David Moloney, 'Heritage Assessment & Conservation Policy: Wuchatsch Dry Stone Walls, 74 Robert Street, Lalor', 6th May 2019
[184] Michelle Knehans, Ecology & Heritage Partners, 'Dry Stone Wall Management Plan, 130 & 150-152 Bindts Road, Wollert, Victoria', August 2018
[185] Walls 3 and 4, Moloney, 220 Epping Road, *op cit*, pp.39-41, 46
[186] Jim Holdsworth, Raelene Marshall, David Moloney, *Melton Dry Stone Walls Study*, Vol.1, August 2011, p.18
[187] Gary Vines, *Wyndham Dry Stone Walls Study*, Biosis, August 2014, pp.43, 167

*Image 16: Historical photograph showing a typical style of wall, on the John Wuchatsch (junior) farm at O'Herns Road Epping. The wall has some very large stones, although fewer than those on Gardenia Road Westgarthtown, and perhaps less massive. It also has a more equal proportion of rounded and angular stone, with regular sized rounded cope stones. (per Robert Wuchatsch)*

*Image 17: Hay Stacking at Schultz's farm, Bridge Inn Road, Wollert (no date), showing oversize foundation stones in wall, rubble construction, with copestones helping tie and secure it. (per Robert Wuchatsch)*

***Images 18, 19:*** *The massive or oversize stones in these walls (on the Merri-Darebin Plains, and Westgarthtown Cemetery) govern subsequent construction, which is 'rubble', rather than the 'coursed' orthodox dry stone wall construction system. (David Moloney, 2019, 2012)*

***Image 20:*** *Orthostats on the bottom course of a stony rise boundary wall between Fenwick Stud and the Growling Frog Golf Course, Donnybrook Road. That these are stones placed on edge rather than boulders is evident from the flattish faces of the stones. (David Moloney, 2020)*

*Image 21: The view along the top of the same part of the wall, showing that, despite the use of orthostats wall dimensions are virtually intact, at c.1150 mm high, and c.800 mm at the base, with copestones intact. Sections of this wall have orthostats on both sides. It is not unusual to find intact walls built of orthostats. (David Moloney, 2020)*

*Image 22: A typical Merri-Darebin Plains wall, built along the top of a stony rise, separating grazing and arable land. The foundation level of the wall contains many oversize and massive boulders. Most copestones remain. (David Moloney, 2019)*

*Image 23: Detail of part of the same cultivation paddock wall, showing the oversize foundation stones preventing coursed construction. The foundation stones in this case extend across the whole width of the wall, preventing conventional double-wall construction with hearting, as evident in the light passing through many parts of the wall. (David Moloney, 2019)*

*Image 24: Milking yard wall on a stony rise on the former William Bodycoat farm. While in this case there are no massive or oversize stones, the wall demonstrates the high proportion of angular stone in typical Whittlesea walls. Nearby are a number of small quarries on rocky outcrops, the likely source of some of this stone. As is typical, the rounder stones, mostly fieldstone gathered from the surfaces of the knolls or paddocks, are used as the coping, although most are now missing here. The small loose boulders in the foreground appear to have been common on local stony rises. (David Moloney, 2019)*

*Image 25: This wall (recently demolished) on a stony rise on the original Maryfield on O'Herns Road is also built primarily of angular stone, again with rounder and more uniform-sized stones used as coping. In the foreground is an old quarry or grub-hole, the likely source of some of the stone. (David Moloney, 2000)*

*Image 26: This road boundary wall at 240 Bindts Road features large base stones, and also a more equal proportion of rounded and angular stone. A nice array of equally sized and mostly rounded coping stones not only contributes structural stability, but gives a visual cohesion and order to the necessarily random non-coursed construction with the awkward local stones. (David Moloney, 2019)*

*Image 27: Flatter slightly saucer-shaped stones often appear in Whittlesea walls, usually as a bedding or plinth ('coverband') for the copestones (the top course). But in the wall above and elsewhere in Whittlesea they are also fitted into the wall, in the manner of traditional plugging. These naturally broke off the top of rock in outcrops as shown here, or could be easily knocked off, as water in fissures froze and cracked the stone. The same process would have applied for large stones, which split off along weathered natural fractures on outcrops, or could be easily prised apart. (David Moloney, 2019)*

*Composite Walls in Whittlesea: Modified and Original*

These walls, or fences, are constructed of a number of courses of dry stone wall, with post & wires above. Formerly, there were also many walls in the area which were 'stone and post & rail', or more commonly in the twentieth century, 'stone and post & wire & rail'. At this stage however no intact post & rail wall has been found (although a few nailed rails have been found, on O'Herns Road and Summerhill Road, which were perhaps 'jump rails' inserted into walls for the Findon Harriers' hunts).

In most of the Whittlesea area today composite fences are found only in combination with post & wire, in which spit timber posts are situated within a wall, and with either timber droppers or steel star-posts to carry the plain or barbed wire. In a few walls mortised slots provide evidence of former timber railing.

Not usually as visually prepossessing as an all-stone wall, these 'half-walls' are a ubiquitous, and perhaps characteristic, Victorian wall; the purpose-built examples are of a type that is apparently little known in Europe.

Robert Wuchatsch advises that half-walls were once 'everywhere' in the study area. They are by far the most extensive type of wall in the City of Whittlesea, and therefore the major component of its dry stone wall heritage.

Some were built intentionally as half-walls, while others were originally all-stone walls that were modified. Most of those in Whittlesea, as elsewhere, appear to be modified all-stone walls, topped-up with post & wire (or less commonly rail), as the wall spread and became lower, and as top courses fell off, or perhaps as greater height was required.

A source of evidence on composite fencing is surveyors' field notes and survey plans for applications to bring properties under the Torrens title system. These mark 'stone walls', 'stone fences', 'post & wire in stone', 'post & wire fence with loose stone base' etc fencing along boundaries, and sometimes on internal paddocks. The statutory declarations on the application files sometimes enable the date of the wall or fence to be dated.

While a larger study would be required to draw any firm conclusions, a sample of eight applications for properties in the study area, on properties ranging in size from around 150 to 5000 acres, have been examined for historical information regarding dry stone walls between 1888 and 1962.[188] The applications were all in the Parish of Wollert, most pertaining to parts of Charles Campbell's massive 'Campbellfield Estate', while others are for the small 158 acre (small) allotments on the north side of O'Herns Road that were alienated in 1853. Some points emerge clearly from this sample of applications, while others are more exploratory at this stage:

- 'Stone' v.v. 'Post & Wire' Fencing.

  In the small farming allotments, by comparison with the Campbell estate, a far greater percentage, usually the majority, of fences are 'stone walls', rather than 'post & wire' and other variants. This may be due to smaller, more intensive farms justifying the expense of all-stone walls; or because smaller farms had more cheap labour (including sons) to build and repair the more expensive all-stone walls.

  However it could also be partly due to lessees of the Campbell estate being disinclined to invest in so permanent an improvement; or simply because parts of that vast estate had relatively little stone.

- Changes in 'Stone' and 'Post & Wire' Fencing.

  Generally, there is a gradual decrease in the percentage of (all) 'stone wall' compared with 'post & wire' or 'post & wire & stone', 'post & rail' etc. over the period 1888 to 1962.

  That this is at least partly a consequence of deteriorating walls is certain in view of the evidence of a wall on the south side of O'Herns Road, which is described as 'stone wall' in 1930, but 'post & wire & stone' in 1962.[189] This confirms the evidence of the wall today, which remains all-stone at the top of a stony rise but is topped up with post & wire for the great majority of its length across softer ground.

  In this it appears to be a typical dry stone wall today across most of Victoria. But this is highlighted in Whittlesea because of its stony rises landscape. The changes are evident in many roadside walls, which are intact on the top of a stony rise, but tumbled-down where they pass over softer ground.

  In later years the same fence-lines increasingly show a combination of both 'post & wire & stone' and 'stone' constructions. These could have been original, for example the result of a survey line having crossed different properties. Or farmers building stone walls over time, perhaps with different wallers, or as the cost of different types of fencing changed. But especially in view of the increasing percentage of this type of description, it is likely that many of these walls were originally all-stone, with sections progressively topped up with post & wire.

This sample suggests that research of other survey plans would provide further evidence regarding the question of the originality of many half-walls in the study area.

The evidence of which walls were intentionally designed as composite walls and which were modified later is inconclusive at this stage. A number of half-walls are shown below, with discussion of features that may be diagnostic. More definitive information might be obtained by archaeological investigation of potential Whittlesea examples.[190]

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[188] Torrens Application numbers: 24952, 26860, 34256, 35976, 37940, 48271, 42304, 53447.
[189] Torrens Application numbers: 48271 & 53447
[190] Eg, investigation of: width at base; double or single wall construction; placement, uniformity and apparent age of posts; uniformity of copestones.

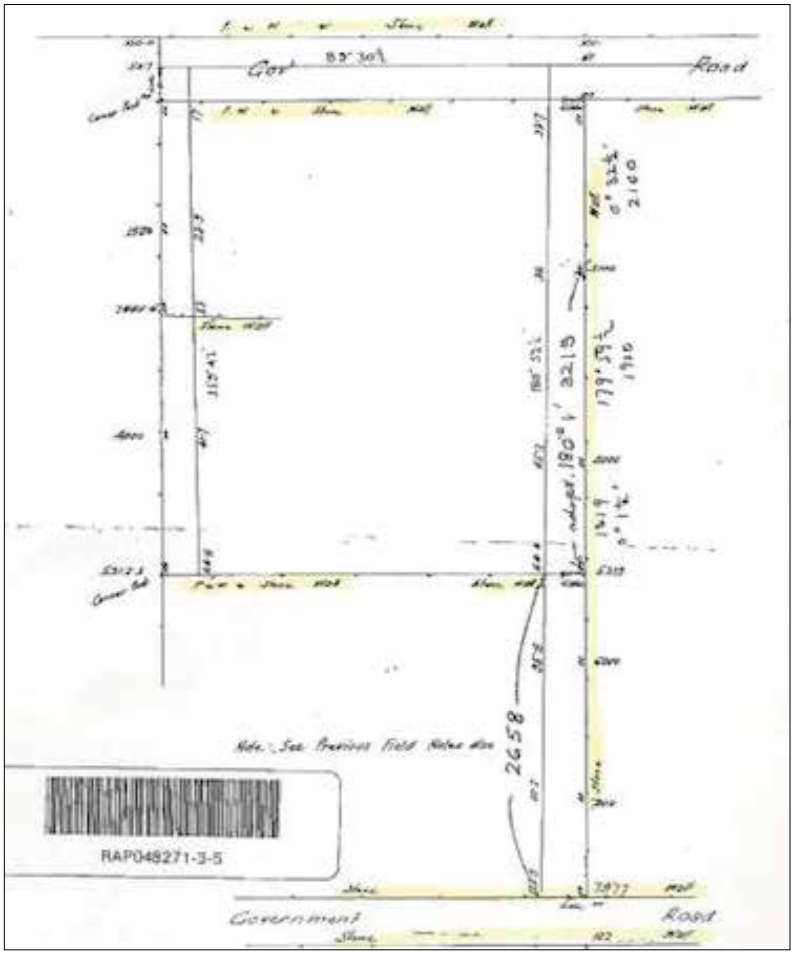


*Image 28: Surveyors Plan for part of a small farming allotment purchased by Gottlob Siebel on Harvest Home Road in 1853. In 1930 the proportions of stone, and post & wire & stone are nearly equal. (TA 48271, 1930)*

*Images 29, 30: Well preserved examples of half-walls in Melton suggest some diagnostics for purpose-built composite walls, including: narrow stone base, sufficient for the intended few courses; consistent construction, regular coping; uniform height; height of the lower hole or mortise; posts and mortises uniform, rather than recycled. Once widespread, purpose-built examples are now relatively few. They may have been built as the result of limited local stone (Peel), and less intensive farming land-uses, for example on the large commercial farms in the south, or the pastoral properties in the north. (David Moloney, 1999)*

*Image 31: William Bodycoat farm wall. Its height and construction are reasonably uniform, and the narrower base suggests it was not an original all-stone wall. Timber posts are reasonably uniform, and regularly spaced, although almost certainly replaced. Star pickets obviously inserted later. Such walls require closer physical investigation to determine whether originally composite, or modified later. (David Moloney, 2019)*

*Image 32: Bodycoats Road. Hidden behind the long grass this half-wall features what appears to be uniformly very early posts, with holes drilled for wire at a height commensurate with a half-wall, despite its wide base, which may indicate an original all-stone wall. (David Moloney, 2019)*

*Image 33: This half-wall is the east boundary of a cultivation paddock on the north (Vearings Road) side of O'Herns Road. The uniform height, and (large) uniform sized cope-stones, perhaps on a single-course double base, are indicative of an original half-wall. It contrasts with the double wall along O'Herns Road to which it is perpendicular. The fence posts appear to have been replaced over the course of time; a new post for an electric fence can be seen. (David Moloney, 2019)*

*Images 34, 35: The composite wall in 2019 (left) has deteriorated since 2011 (right).*

*Likely original post & wire & rail & stone half-wall, on western boundary, 80-90 Harvest Home Road. Has old and uniform posts with single mortise, and hole for one strand of wire below, all at height commensurate with original half-wall. While structural features such as portions of uniform (massive) coping also suggest this was its original form, its wide base might suggest an original all-stone wall, especially as this width is identical with the wall's northern extension, which is clearly a modified all-stone wall. It may have been built with a wider base with a view to later completion of an all-stone wall. This wall warrants further physical (archaeological) investigation. Even if not an original half-wall, it is an outstanding representation of a modified all-stone wall, an important 'type' of Whittlesea dry stone wall. (David Moloney, 2011, 2019)*

*Post & Rail Fencing*

As noted, 3 feet 6 inch post & rail fences are said to have been the most common early fence type in Australia.

In 1868 the Langfords leased out their property 'Woodstock', located south-west of the corner of Epping and Donnybrook Roads, to Robert Hunter. Like most lessors of the period, they did not allow the destruction of trees from their property. However, they specified an exception in this case:

> 'to cut and fell all such trees as may be grubbed up by the roots … for the erection or reparation of fences thereupon.'[191]

In the open redgum country at Woodstock considerable use was made of post & rail fencing. Extensive post & rail fencing, in combination with stone walling, was noted on Joseph Cotchin's farm on Epping Road at Woodstock in 1883.[192] The road boundaries of James Whitty's Woodstock Farm, opposite Cotchin, are known to have been fenced with post & rail by 1857, and possibly 1853 or even earlier.[193]

Even in the more sparsely timbered country further south, post & rail fences were a common sight. Thomastown in 1887 was described as 'stony' and 'walls common', but on JS Morgan's 3000 acre *Sambourne Farm*, the fencing was described as 'stone wall, post and rail and wire.'[194]

*Ditch 'Walls'*

The Fences Statute 1874 notes a variation to fences and walls which incorporate a 'ditch'. An archaeological study in 1989 noted a c.150 metre ditch beside the wall of one of the enclosures on Merri Creek, on the south side of O'Hern's Road.[195] The 1874 statute required ditches to be at least 2'6" wide, and 2'6" deep and associated with a wall or fence at least 3' high, or alternatively to be 2' deep and associated with a fence at least 3'6" high. There is no specification on the distance between a ditch and wall in these cases, although the wall or fence associated with a 'natural stream ditch' is required to be no more than 1'6" away.[196]

Thirty years later, the ditch identified in 1989 is now discontinuous, with a c.25 metre filled-in section. Its maximum depth is c.700 mm, just short of 2'6". Curiously however it is: c.3.5 to 5 metres distant from the wall; only associated with one of the enclosure walls; and situated inside the wall. None of these features would appear to be optimal for keeping animals out of the enclosure. Possible explanations might include that it was meant to keep animals in rather than out (ie that it was a stock, rather than a cultivation, enclosure), or that it was the original 'fence', which was later augmented by a wall. The latter would seem more likely, as this north boundary, and the west boundary of the enclosure clearly divide stony rises from arable land.

[191] PROV, VPRS 460/P0/898, TA 10575
[192] *The Leader,* 16th June 1883, p.10
[193] PROV, 'New Roads 122', 1857; See also 'Woodstock Mixed Farming & Horse Stud Precinct' (below)
[194] *The Leader*, 12th November 1887, p.11
[195] Hall, Roger, 'Merri Creek Parklands, Aboriginal and Historical Heritage Survey', Report prepared for the Merri Creek Bicentennial Committee 1989, p.52
[196] The Fences Statute 1874, Section 4 (ix-xi)

***Image 36:*** *Part of the ditch, with wall behind the hedge planting several metres to the right. (David Moloney, 2019)*

In the light of the paucity of information about ditch walls in Victoria, the O'Herns Road wall-ditch gap might also represent once-orthodox practice. While ditches associated with dry stone walls are described in UK literature, no other examples of ditch walls are presently known in Victoria. While a state-wide heritage survey of dry stone walls might yet reveal other examples, none have been identified in studies undertaken in the Melbourne region (the municipalities of Whittlesea, Hume, Melton, and Wyndham).

This ditch and wall are undoubtedly of high scientific significance, with potential to reveal information regarding one of the earliest types of fencing in Victoria.

*Hedge Walls*

The 1874 Fences Statute identified 'a close hedge or live fence' (minimum 4'6" high) as a type of fence in Victoria. These were sometimes planted in association with a dry stone wall, and especially with composite walls.
In 1884 however, an agricultural reporter in the Wollert–Woodstock area was surprised to find that 'very little hedge planting has been carried out in the district, which circumstance appears someone strange, as having the advantage of a moist climate, hedges of all kinds would flourish luxuriantly.'[197]

There appear to be very few walls in Whittlesea which have remnant hedges, although a few, apparently of Hawthorn, and Briar Rose, have been observed. These would increase the significance of a wall. More detailed investigation is required in all cases, as fence-lines are often the location of 'self' (or bird) sown 'hedge' growth.

[197] *Weekly Times*, 9th February 1884, p.1

## Whittlesea Walls in the Twentieth Century

In 1942 Epping farmer Mr Ernest Cotchin testified that stone walls had ceased to be built in this region around 1900, 'on account of being too costly to erect and maintain in good condition besides being a harbour for vermin.'[198]

While generally the era of building walls had passed in the twentieth century, research into Closer and Soldier Settlement might reveal whether there were any walls constructed on new Whittlesea dairy farms in that period, as they had been in the Western District around the Pomborneit stony rises.

During the 1930-40s some farmers sold their walls to contractors with travelling stone crushers. The crushed rock was probably then used for road making. The farmers used the money they received for the stone to build post and wire fences.[199]

It is known that local small-scale new walling, and of course repairs, continued, using skills passed down through generations of farming families. For example, Sylvia Schultz, a descendent of many original families, remembered that in her early days there had been small cottages 'everywhere' in the area, the dwellings of general rural labourers. These men were always in need of work, and farmers such as CH Schultz had a group of men on hand to build a dry stone wall if required. Their cash payments were small, but were topped up by farm produce.[200] As late as the 1970s Norman Wuchatsch and his son Robert were building small new walls, and making repairs to old walls on their Westgarthtown property.[201] In the early twentieth century, manager Arthur Yann built a massive walled stockyard at *Gilghi* (1660 Donnybrook Road), shown on the 1935 Army Ordnance map, which he managed for the Tolleys.

## Purposes of the Whittlesea Walls

In the early decades of farming, fencing and particularly walls appear to have been a measure of the soundness of an enterprise. After noting the 'solid bluestone walls' of the farm buildings, the reporter at Dr Wilson's farm *Summerhill* in 1864 recorded that the fences were similarly of a 'substantial character' and 'of stone'. Dr Wilson made sure to relate that the 'length of stone wall is already more than twenty miles'.[202] While Dr Wilson was well known in Melbourne circles, and *Summerhill* was regarded as a 'model farm', for most farmers in the district dry stone walls were primarily utilitarian structures, made with a plentiful local material.

*Cultivation Paddocks*

The historical evidence suggests that the first walls to be built in Whittlesea were not rectilinear boundary walls, but freeform walls shaped by the landscape. While most dry stone walls in Victoria have been designed to keep stock in, these walls were built to keep stock out. These walls were the beginning of a practise that has shaped much of the Whittlesea stony rises dry stone walls.

In 1838 the Parish of Keelbundora was part of the first sale of 'country' lands in Port Phillip. Although the intention was to release land for farming rather than pastoral purposes, the size of the freehold allotments offered meant that they were out of reach of small farmers. The land was sold in Sydney in large parcels, of up to two square miles, and purchased by investors and speculators.

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[198] Ernest Cotchin, 'Epping farmer', statutory declaration 6th October 1942, VPRS 460/P1/1077 (Torrens Application 50369)
[199] Robert Wuchatsch, email 29th May 2019, was given this information by an uncle, who specifically mentioned the Winter farm at Westgarthtown. This would appear to have been a widespread practise around Victoria in the 1930s Depression.
[200] Personal conversation, Mrs Sylvia Schultz, 15/3/2013
[201] Email, Rob Wuchatsch, 4/1/2019
[202] 'Visit to Dr Wilson's Farm at Somerton', in *Farmer's Journal and Gardener's Chronicle*, 20th May, 1864, p.8

The only hard evidence the Sydney buyers had to guide them in their purchasers were the survey plans, which may explain why the lands along waterways were purchased, while much intervening land remained unsold. Even though the 1837 Melbourne Surveyed Lands Northward map shows an unnamed creek passing through, these unsold lands included Crown Allotment 25, the square mile allotment that later became Westgarthtown.

Robert Campbell junior purchased extensively in the parishes of Will Will Rook and Keelbundora, including large allotments on both sides of Crown Allotment 25. He was part of the prominent Sydney Campbell family, whose Duntroon property in NSW was a staging post for sheep overlanding to Port Phillip.[203] In 1840 his cousin Charles purchased all of the southern landholdings of fellow Sydney investors Hughes & Hosking in the Parish of Wollert, some 5000 acres immediately north of Robert's holdings.[204]

The Campbells, Charles in particular and his father Robert senior, but also Robert junior, while entrepreneurial pastoralists, supported the settlement of small farmers.[205] Robert junior's freehold land might have been used for pasture, along with the 'grass rights' to which he would be entitled to on unsold Crown land adjacent to his freehold, or for tenant farming, or a mixture of both.

Different parish surveyors recorded different information. While the surveyor of Wollert provided description of the natural landscape, other surveyors included features of pioneering European settlement, such as huts, fences, tracks and crossings. The Keelbundora surveyor noted 'cultivation' structures, two with an associated 'hut', shown on early maps on the boundaries of CA25, which are rare evidence of early farming.

While the two huts shown on different versions of 1840s maps may have been for Campbell's shepherds, cultivating gardens for themselves or crops for Campbell, a number of factors point to them having been built by tenant farmers. The huts were relatively close (no more than a mile apart), making it unlikely that they were shepherds' huts. The cultivation paddocks would appear to have been very large, maybe 4 hectares or more in size, and as such would have been used for cropping rather than a domestic garden. However Campbell did not have a 'manor' or even a homestead on this land, with employees as envisaged by Wakefield, so it is most likely that they were the work of tenants.

While the 'cultivation' fences – built to protect the crop from domestic or wild animals – could be of any material, the evidence is that they were dry stone walls. Firstly, their irregular form is clearly dictated by the landscape, which in this area is dominated by stony ground and knolls.[206] Secondly, it is almost certain that fences around stony rises themselves would have been built of the material most immediately to hand, as was typical in early settlement; stone is also the most suitable material, as fence posts are difficult to fix on stony land. Thirdly, as only part of the cultivation paddock was marked it is likely that this was the most substantial or 'permanent' part of the construction; the rest of the enclosures were likely to have been the temporary or lighter materials that are marked elsewhere in other early plans of this area, such as 'brush fence' or 'make-up' fence, essentially piles of tree branches. Fourthly, the 'brush fences' and post & rail fences marked elsewhere on the earliest plan had disappeared in later maps (1858 and 1860), whereas the 'cultivation' fences are still shown, indicating a more enduring material.[207]

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[203] Whittlesea historian JW Payne says that Robert Campbell junior at one stage had the Kinlochewe pastoral run, near *Summerhill*. In 1843 Rev Charles Dunmore Lang had described the Kinlochewe settlement as the image of his ideal Scottish agricultural yeomanry.

[204] PROV, VPRS 460/P0/2723, Torrens Application 26860, various indentures of Lease and Release

[205] Newman, CET, 'Charles Campbell', in Pike, D (ed), *Australian Dictionary of Biography*, MUP, 1996, Vol.1, pp.198-199; 'Robert Campbell', in Pike, ADB, Vol.1, op cit, pp.202-206; Steven, Margaret, 'Robert Campbell junior', in Pike, ADB, Vol.1, op cit, pp 206-207

[206] This is corroborated by an early aerial photograph of a then undeveloped part of this same landscape, which shows stony rises near the location and of the shape of the most westerly of the 1840s cultivation paddocks, although without any obvious evidence of a wall itself. ('Melbourne Outer Suburbs Project, February 1956')

[207] PROV Historical Plan FEAT470, 1858; PROV Put Away Plan K25A (1860?)


***Image 37:*** *Crown Allotment 25, Parish of Keelbundora, in the early-mid 1840s, still unsold. It shows four 'cultivation' paddocks, all on the boundaries of allotments owned by Robert Campbell junior, and three partly within CA25, the future Westgarthtown. The irregular plans of the fencing strongly suggest that these were dry stone walls, built with stone from and conforming to the shape of these rises. A stony rise in the south-west corner is marked. (Roll Plan 104A 'Melbourne Surveyed lands Northwards', nd)*

These early 'Westgarthtown' maps disclose significant information, not only about the City of Whittlesea's dry stone wall heritage, but about early farming in Port Phillip.

Firstly they clearly portray the earliest origins of a particular and important type of dry stone wall in Whittlesea. Whereas generally in Victoria dry stone walls were built to keep stock in, in Whittlesea they were also extensively used to keep stock out of limited sized cultivation paddocks. Not only this, but the density of stony rises combined with the intensity of small farming eventually created a distinctive complex character of dry stone walls in Whittlesea.

They also shed light on a continuing practise in Whittlesea wherein dry stone walls were often used only on those parts of cultivation paddocks around the stony rise itself, with the softer alluvial ground fenced by post & wire, and no doubt other types of lighter fencing in earlier periods.

The surviving remnants of dry stone walls on the Merri Creek near O'Herns Road appear of an early date in terms of their informal, free-flowing design, which is obviously related to the landscape, in a larger open rural setting. They separate stony outcrops from arable soil. In their purpose and landscape-derived form they are a template for later, more regulated forms of walls in the district.

*Image 38: Near Merri Creek north of O'Herns Road there are four large stone wall enclosures, and several smaller ones, situated on Crown Allotment 7 in the parish of Wollert, purchased by Hughes & Hosking in 1838. Inspection of the centre paddock reveals its enclosed land to be distinct in vegetation from surrounding lands, some of which is stony outcrop. This was possibly a cultivation enclosure. The enclosure below is bisected by a small tributary, similar to other enclosures in the district, suggesting it was a stock yard. (Multimap, June 2014)*

*Image 39: Former view of part of Schultz's Pine Grove farm on Lehmanns Road, showing similar but later, regularised, paddocks enclosed by dry stone walls. The upper paddock is bisected by a stream, similar to that on Merri Creek (Image 38); the lower one may have been for cultivation. (Google satellite image, June 2014)*


*Image 40: No.905 Epping Road appears to show a partly walled cultivation paddock on the right, and two partly-walled paddocks bisected by the Darebin Creek, similar to those on the Merri Creek (Images 38, 39). (Google satellite, June 2019)*

*Later Cultivation Paddocks*

The 1840s practise of building cultivation paddocks with dry stone walls continued with the small freehold farms that established in the area from the 1850s. Remaining examples of these and other small walled paddocks are an exceptional feature of the City of Whittlesea's dry stone wall heritage, and would appear to be a distinctive part of Victoria's rural and dairy heritage. They appear to comprise the most intensive such complex in Victoria (see Chapter 6).

The complex patterns of cultivation paddocks and stock yards are a feature of those parts of the small farming parts of the study area used primarily for dairying, but also for mixed farming. There is typically a much greater density of dry stone walls in farming areas than in pastoral areas, despite the fact that both land-uses are situated in exactly the same volcanic landscape, including stony rises. Whereas large pastoral runs principally required fencing for boundaries and large paddocks, farms had a need for fencing to separate stock from crops, for animal husbandry, and for dairy yards. The more intensive uses of farming land justified more investment in the land, including clearing the property of fieldstone. Farmers, with their sons and intermittent rural labour, were in a position to undertake the labour-intensive work of clearing land and building walls. Whereas stony land needed to be cleared for crops and to maximise grass for cattle on small farms, clearing of land was not necessary to make sheep pasture viable.

On the small farms of the study area, the uncommon 'stony rise' geomorphology necessitated a more intricate pattern of internal walls to separate the stony rises from the arable soil. It is known that, in extensive areas, only about one third of farms were cultivable due to stony rises and outcrops.[208] The dairy cattle were grazed on the mineral rich grasses of these stony rises, and the shallow valleys in between where alluvium had accumulated were cleared of surface rock and turned into cultivation paddocks.[209]

[208] In other parts it appears to have been more (eg Unmacks, Harvest Home Road)

[209] The understanding that stony ground grew 'sweet' grass was apparently widely accepted. Eg, in the 1890s parts of the Chirnside Brothers great Werribee Park pastoral estate were let to tenant farmers: 'The Chirnsides retained the "rocky" country, which was not fit for cultivation, but which was quite good grazing country, growing a nice quality of wool.' (Morris, G, 'Centennial History, Werribee', extract obtained from *Werribee Banner*, 5th April 1962)

In the European manner dry stone walls, usually in conjunction with other types of fencing, were constructed around the small (in Australian terms) cultivation paddocks to confine them from the cattle grazing on the rises. In these difficult irregular shaped paddocks, some of which featured the area's famous rich black soil, were grown oaten hay, maize, mangels and other feed (or forage) crops for the dairy herd and farm work-horses. No doubt some were just sown with introduced grasses for pasture.

In the freehold farming era walls continued to be built in curves around the stony rise or cultivation paddock, but such freeform walls were also modified into series of right-angles, apparently just for 'neatness', but perhaps also to facilitate cropping. The stony rises of Wollert, in conjunction with traditional and locally evolved farming practises, thus shaped a distinctively patterned system of dry stone walls whose intensity may be unique within Victoria.

The German families were markedly industrious in building dry stone walls. In 1991 the Whittlesea Heritage Study identified the 'Harvest Home Lane Conservation Area' in Wollert, noting that the intensity of small farms and dry stone walls in the area were in a 'European rural village character'. While patches of this type of development occurred throughout this district, the Harvest Home Road area was 'the most intensive and the most intact example'. It was assessed then as being 'of regional significance as the best surviving example of extensive drystone walling and close-settled small scale dairy farms near Melbourne'. While this area included a mixture of ethnic groups, the 'German involvement' was prominent.[210]

As well as their energy and affinity with stone, the walls may also express something of the desire of the ethnic German farmers for neighbourhood and community. By 1871 the 600 acre area bounded by Harvest Home Road, Bindts Road, Lehmanns Road and Epping Road, which had been sold by the Crown in three allotments, had been partitioned into nine properties, seven of which were small farms, many German owned.[211]

***Image 41:*** *The intensive dry stone walling on a study area dairy farm, even without stony rises. Former Bodycoat farm. (David Moloney, 2019)*

[210] Meredith Gould Architects, 'Whittlesea Heritage Study 1990' (City of Whittlesea, Ministry for Planning and Environment, 1991), 'Harvest Home Lane Heritage Conservation Area', Epping Area A.5.

[211] PROV, VPRS 14601/P/3, Shire of Darebin Ratebooks, 1871-72. Peel states that 150 acres was 'by no means a large farm for the mixed farming system developing by the late sixties'. Presumably specialised dairy farms were smaller, but Peel does not provide an average size. (Peel, *op cit*, p.135) This was however the period when the original c.50 acre Medland Estate blocks were being consolidated.

*Image 42: Aerial showing part of Westgarthtown and land to the north in 1945. The walled cultivation paddocks are clear; while still irregular, their boundaries are no longer freeform, as on the Merri Creek, but have been straightened. Depending on the amount of stone in an area, either the arable land or the stony rise is enclosed. (Melbourne & Metropolitan Project 12, 1945; Rob Wuchatsch, 2019)*

*Image 43: The regularised 'stepped' dry stone wall in the centre of the detail from the 1935 Ordnance Plan (left) is clear in the 1960 aerial photograph (right) to be the boundary of a cultivation paddock. Field inspection of the site (then 220 Epping Road) in 2011 confirmed the wall separated stony and arable land.*

*Image 44: 80 Harvest Home Road, looking north from Harvest Home Road. About six separate walls are visible in this photograph. In the foreground is part of a 'stepped' paddock. (David Moloney, 2019)*

*Image 45: 80 Harvest Home Road, looking south-west. Another five walls skirting stony outcrops, partly enclosing cultivation paddocks, are visible here. (David Moloney, 2019)*

*Image 46: Gilghi, a larger farm (probably originally a 'mixed farm') at 1660 Donnybrook Road, has a long freeform wall separating a stony rise from arable land. The wall on the edge of the stony rise, and the lighter (post & wire) fence on the softer ground is a form of cultivation paddock that goes back to the 1840s in the study area. The young trees in the foreground suggest that the paddock is now sown to pasture and grazed rather than cultivated. (David Moloney, 2000)*

*Image 47: A wall marches across the top of stony rises, rather than skirting around them, at 260 Craigieburn Road East. This was clearly a way to build shorter and more durable walls. Also occurring on larger farms in the Western District, this may also reflect reduced pressure to make optimum use of ground available for both pasture and cultivation, as appears to have been the case on the small fresh milk farms in Epping-Wollert. Or it may reflect a different practise, of sometimes allowing grazing on cropped land. (David Moloney, 2019)*

*Boundary Walls*

This is the conventional type of wall that marks the cadastral grid of European occupation, and the rectangular paddocks into which private rural properties are generally subdivided. They are the characteristic type of wall found across Victoria's volcanic plain.

Road walls are usually the most conspicuous of the boundary walls. This prominence enhances (or 'qualifies') the inherent heritage values of a wall, whether these be its landscape aesthetic value, its particular formal or structural values, or its historical or social values. This type of wall is therefore amongst the most significant walls in the study area.

A very common problem with road walls is that they are commonly hidden behind grass growing on the road reserve. With inevitable missing copestones, and some parts in a deteriorated condition, they present as a less than contributory landscape feature. When viewed from above however their constructional values, on clean solid foundations, and arrow-straight plan, is usually striking. Similarly, when the grass is cut, their elevation can present a very different aspect.

The study area is also highly unusual amongst the other areas of dry stone walls on Melbourne's fringe in having a number of 'double' road walls, with walls on both sides of a road. These greatly enhance the 'presence' of the walls in the landscape, and clearly amplify their other historical or social values.

Conventional boundary and paddock dividing walls are usually straight, which in stony rise districts attributes to them another particularly impressive and distinctive visual quality. These walls go straight over the stony rises, rather than around them. Because the structure of walls is usually highly intact on the solid foundations of a stony rise, there are many walls whose original all-stone condition is dramatically evident in Whittlesea. An understanding of the construction of stone walls, the importance of foundations and the different topography of the area is particularly evident with long walls, as their condition rises and falls as they cross stony rises, and the intervening softer ground where the walls have invariably spread or 'exploded' on the cracking clays, and their condition is much poorer. This is visually very interesting, instructive in terms of heritage, and of general educational value. It is a quality which is not known elsewhere on the fringe of Melbourne.

***Image 48:*** *On larger farms the visual presence of the grid is weaker, but together with road walls can still constitute a distinctive and strong sense of place. The Medland Estate, from Summerhill Road. (David Moloney, 2019)*

*Image 49: No.320 Summerhill Road. On grazing properties, a grid is less noticeable. Long straight walls still constitute a substantial landscape presence, but from a much larger perspective. Any 'precinct' they form is much larger and more visually dilute. (David Moloney, 2019)*

*Image 50: A substantial length of Bindts Road features high-quality dry stone walling, Whittlesea's best example of walling on both sides of the road. Indigenous red gums enhance the aesthetic value of the walls. (David Moloney, 2019)*

*Image 51: Double wall on Bodycoats Road. The left wall is a reasonably prepossessing and well maintained all-stone wall. The half-wall on the right, barely visible behind uncut grass, is also of contributory significance as a characteristic composite stone and post & wire wall. (David Moloney, 2019)*

*Image 52: A short relic of double walling survives on Summerhill Road. (David Moloney, 2019)*

*Images 53, 54: Walls over stony rises. These views clearly show the contrast between the high and intact structure of walls as they pass over stony rises, and their breakdown over softer ground. The wall at left is an original north-south boundary wall on the Medland Estate, east of Bodycoats Road. The wall at right is the east-west boundary wall between 240 & 270 Bindts Road. (Google satellite, 2019)*

*Images 55, 56: Bridge Inn Road. A conventional 'double wall', which is strikingly and typically more intact where it passes over a stony rise. The section at left is close to its original condition, with a base of 800 mm, and height of 900 mm – 1250 mm. The majority of the same wall on softer ground (right) has spread to be c.1300 mm wide at the base, and is only c.550 mm high. (David Moloney, 2013)*

*Image 57: Typically intact and short (c.30 metres) section of a road wall over a stony rise, O'Herns Road. (David Moloney, 2009)*

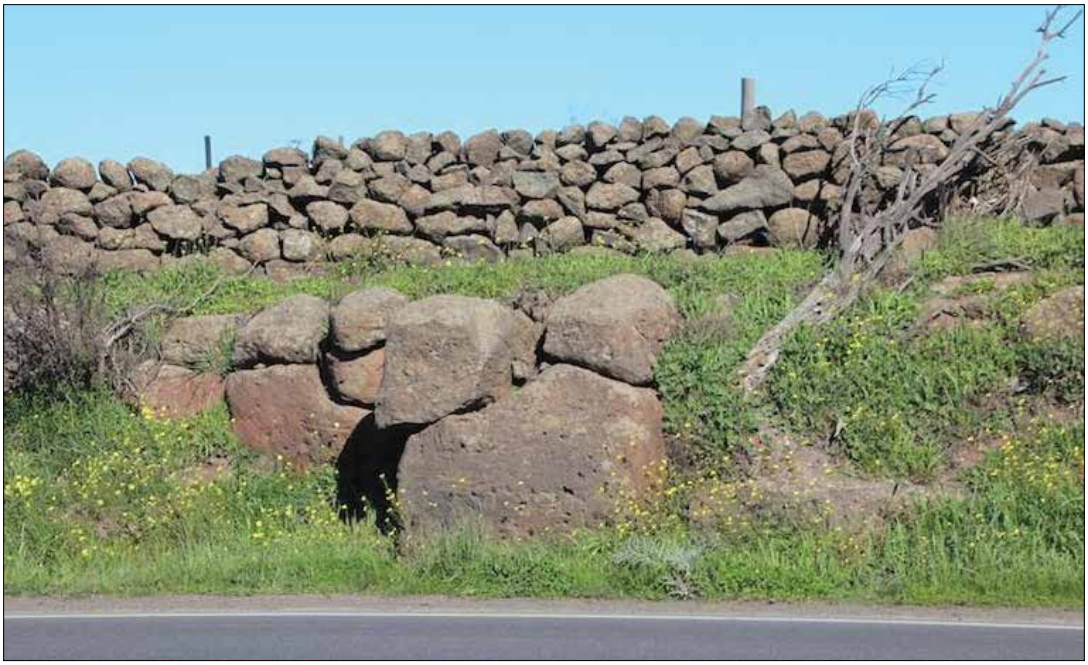

*Image 58: Craigieburn Road East, south side, cutting through a stony rise, provides a very prominent example of an intact section of dry stone wall on top of the stony rise; the wall collapses across lower ground immediately to the east. Note the blocky fractures in the base rock. (David Moloney, 2019)*

***Image 59:*** *No.1220 Donnybrook Road cutting through stony rise, east of Epping Road, south side. Again, showing natural, blocky, fractures in base-rock, and two walls on stony rise in good condition above (one barely visible, behind). (David Moloney, 2019)*

*Farmsteads: Intensive Dry Stone Wall Complexes*

- Milking Yards

  No doubt once near-ubiquitous, the most historically important component of farms in this small dairy farming district was the milking yards. The majority appear to have been constructed with dry stone walls. Despite steady losses as a result of the rolling out of suburbia, a number survive; a comprehensive survey of remaining examples would be timely. Most surviving examples are under threat and deteriorating. An outstanding example found in this study is at *Langton Lodge*, off Bodycoats Road.

- Horse Yards

  Horse breeding, especially of draught horses, was also common among the small farmers of the district. Horse (or stallion) yards would once have been widespread.

  Those which were constructed with stone walls were distinctive and visually prepossessing structures whose walls were among the highest stone structures in the municipality.

A prominently situated example was that on the Hehr farm, which was a landmark on the east side of Epping Road south of Lehmanns Road prior to its demolition c.2010 as part of suburban redevelopment of the property.

The remarkable example at *Fenwick Stud* was likely one of the largest horse yards in the municipality. It is the best remaining dry stone wall structure in the municipality today, and one of the best dry stone wall horse yards in Victoria.

- Bull Pens

  Dairy husbandry was also a widely practised amongst local farmers. There are reported to have once been common, built with high dry stone walls in characteristic circular plan.

  None of these have been encountered in this study; a comprehensive search of any remaining examples would be timely.

- Orchards and Kitchen Gardens

  Not all intensively built walls were animal related. It was usual for fully-enclosed (sometimes with dry stone walls) orchards and kitchen gardens to be established very close to a farm house.

  Beside the former Timms bluestone dwelling at 130 Bindts Road is a large dry stone walled enclosure. Numerous old trees within it, apparently fruit trees, suggest that at least part of it was an orchard.

  This would be the only such dry stone walled orchard enclosure yet identified in the area. As with milking yards, horse yards and bull pens, it would be timely to investigate other remaining examples.

- Entrance Driveways

  *Pine Grove*, on Lehmanns Road, has a fine dry stone walled driveway entrance to the farmstead, with mature pine plantings. (Dry stone walls and pine trees were a characteristic aesthetic of German settlers, as evident first at Westgarthtown, including Ziebell's house, which was known as *The Pines*, and at the nearby *Pine Park* of the Hehr family).[212] It is not known whether any other examples remain.

[212] John Borrack, 'An Appreciation: The pine trees of Westgarthtown', in *Elements of Westgarthtown*, Vol.21, No.1, April 2017

*Image 60: The dry stone walled enclosure beside the former Timms house, at 130 Bindts Road Epping. Within the enclosure are a number of very old trees, suggesting a former orchard and perhaps kitchen garden. This part of the enclosure built along the ridge of a stony rise is in good condition. Note the use of oversize and massive stones, some placed on edge, in characteristic Merri–Darebin Plains style. (David Moloney, 2019)*

*Image 61: Fenwick Stud horse yard on Donnybrook Road encloses an extremely large area. Some of its walling is over two metres high, and appears to be professionally built. A portion has recently collapsed and needs repair. (David Moloney, 2019)*

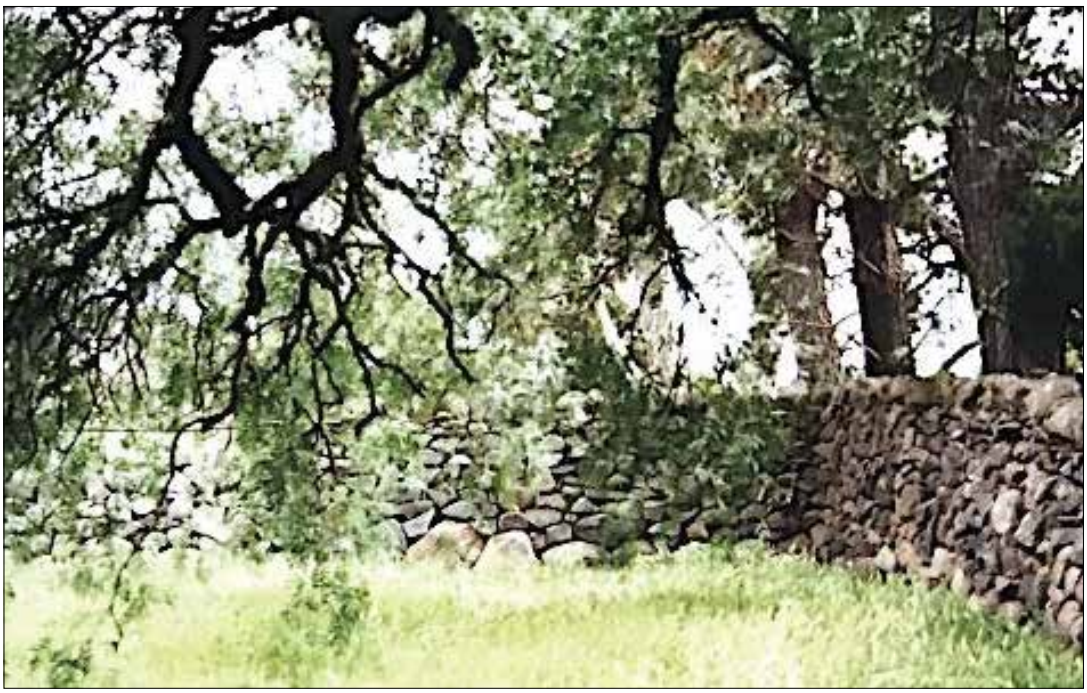

***Image 62:*** *The former Hehr's Horse Yard, Epping Road, demolished c.2010. (Rob Wuchatsch c.2000)*

*German Stream Walls*

Discussion and historical photograph of Westgarthtown's 'stream walls' are included later in this report ('Precinct No. 2: Westgarthtown German Settlement'). The 1850 subdivision of Westgarthtown had ensured that every settler had access to the stream that bisected the 640 acre allotment. Retaining walls were built on alternate sides along the creek bank to prevent stock from straying onto the opposite property, and also perhaps to manage access to and fouling of the stream by home stock.

Although Edgars Creek is now concreted and no retaining walls survive in Westgarthtown, these appear to have been precursors of similar walls built by the Schultz family, further north, in the Wollert area. There may have been other similar walls in the district.

The first of these Schultz walls, now situated on the Hanson Quarry site south of Bridge Inn Road, was built to drain swampy land soon after GE Schultz purchased the property in 1888. Some 130 metres long, it is high (1300 mm) at its north end, but its south end is low and of much poorer condition. Overall it is an exceptionally well-built structure, of high integrity and condition. Its west side is near level with the ground, while its east side is high (1300 mm) at its north end. It has a stone base to the channel; presumably this apron protected its foundations from being undercut. Its wall face features both small angular quarried stone (perhaps offcuts of stone used for Schultz buildings on the north side of Bridge Inn Road), and other sections of more conventionally shaped field-stone.

The second of the walls was nearby, on the Lehmanns Road Schultz property, where it is still known as the 'Topp' stream diversion wall after the elderly German couple who occupied this site in the nineteenth century. The proportions and construction of this wall are comparatively very modest, but its integrity and condition appear to be good.

Other known Victorian examples of dry stone wall diversion channels were built over very long periods by Indigenous people, for very short-term mining projects, or for giant pastoral projects. In western Victoria the Gunditjmara people built eel traps in the Lake Condah area. In the late nineteenth century numerous stone-lined diversion channels were built to enable mining of alluvial gold in original stream beds. In the west of Melbourne the pastoral giant Sir WJ Clarke built a series of dry stone wall dams in an attempt to drought-proof his Sunbury, Diggers Rest and Rockbank estates. The Whittlesea stream channel walls are unusual in their purpose and style, and apparently rare in having been built by small farmers. They are a significant part of a distinctive and significant German legacy of dry stone walls in Whittlesea.

*Image 63: Former retaining wall built to channel and drain water on former Schultz property, south side of Bridge Inn Road. Fragments of the stone base of the channel is visible. It is beautifully constructed, mainly with quarried angular stone in this section, with round field-stone as coping. (David Moloney, 2013)*

*Image 64: Less prepossessing but still substantial, the 'Topp' stream diversion wall, on Schultz property, Lehmanns Road. The west (right) side is just above ground level, and the east (left) side channels the intermittent Findons Creek East Branch. (David Moloney, 2013)*

# Chapter Four (Precinct No.1)

## 'The Campbell Precinct: Early Port Phillip Farms, and Major Commercial Dairies'

### Introduction

The story of dry stone walls in this precinct is the story of the Campbell family. This goes to the area's alienation as part of the first sale of Port Phillip agricultural land in 1838, to Crown land policy in this early era, and then the occupation of a great tract of land by the families of brothers Charles Campbell and, immediately south of him, Robert Campbell junior, into the twentieth century.

The key phases in the historical development of this precinct are:

- small freehold farming, unsuccessful subdivision by Charles Campbell in 1840 (the Argyle Estate) and again in 1849;
- the repossession and leasing out of this land to farmers over subsequent decades;
- the consolidation from the 1860s until 1912 of most of these farms into the large leases (c.1500-3000 acres) of the great commercial dairymen, TH Baker and JS Morgan; and
- the c.1912 subdivision and sale of the estate into 'farmlets', the southern parts on rock-strewn country which were apparently soon abandoned,[213] and the northern parts, which (some after consolidation) were successful.

It is possible that walls survive from the 1840s Argyle Estate. No walls associated specifically with the late twentieth century cultivation paddocks or stock yards of JS Morgan are known to have survived. Parts of the mid-twentieth century Charles Campbell estate's boundary walls survive, including walls associated with the leases of Baker and Morgan, and part of the Wollert township reserve boundary. Some internal walls of Charles Campbell's northern tenants survive. A few tumbledown walls on parts of the Robert Campbell junior estate are presumed to date to nineteenth century tenancies rather than the early twentieth century freehold farmlets.

The history of the development of this precinct thus encompasses the breadth of farming in the nineteenth century, from its very beginnings in Port Phillip, to its tenancy by dairy farmers, and then its occupation for two of the largest dairy farms in Victoria.

The two principal parts of this Campbell precinct are: 'The Argyle Estate: Pioneering Port Phillip Farming' and 'Large Dairies'. These very distinct aspects of the history of the precinct, both noteworthy, are considered separately.

[213] Borrack, J, 1988, *passim*.

## Description

The most prominent and enduring historical use of this land in the nineteenth century was by the very large dairies that supplied fresh milk to Melbourne. By the late nineteenth century these appear to have occupied all of the Campbellfield Estate, thus the boundaries of the precinct are the boundaries of the Campbell estate in parts where dry stone walls are known to survive.

A characteristic of this area is that it was so little developed. Dry stone walls were perhaps the principal human marks on the landscape, and are evidently the most enduring. Crown Allotments 5 and 7 (the O'Herns Road, Vearings Road portions of the Argyle Estate site), was one of the most intensely developed clusters of dry stone wall on the estate. Near Morgan's dairy on Epping Road there were cultivation paddocks, and a concentration of walls, none of which survive. Another hub of walls was located on the land on which the Epping Wholesale Fruit and Vegetable Market is now located, none of which survive. Other than these occasional hubs of internal walls, the estate was dominated by the few very long straight walls, most of which were the boundaries of the Campbellfield Estate (Images, 83, 84, 86, 91), a number of which survive. There is also at least one reasonably sized surviving portion of a Wollert township reserve boundary wall.

While in other parts of Whittlesea the dry stone walls are more lushly set, the walls on the flat basalt plains have their own sparse aesthetic. The Epping–Thomastown–Campbellfield plains also have a very distinctive history. It is a history that was shaped by a quirk of government land policy in the 1830s, which privileged Crown land purchase by men of capital, and so encouraged a monopolistic ownership of land in this area that lasted until the early twentieth century.

The following are potentially contributory walls and fabric associated with the precinct, based on physical inspections and satellite views. Full survey may reveal others.

*A. The Argyle Estate: Pioneering Port Phillip Farming*

Parish of Wollert, part of Crown Allotment 7, north of O'Herns Road, east of Merri Creek:

- Three large irregularly shaped dry stone wall enclosed paddocks, two possibly cultivation paddocks;
- Another irregularly shaped fully dry stone walled enclosed paddock, bisected by a stream, which may be a stock paddock
- A complex of smaller dry stone walled stock-yards adjacent to foundations of a former homestead;
- Another small yard, with remains of early building;
- South of this, a dry stone wall along east bank of Merri Creek, and the remains of a ford.
- On the west side of Vearings Road, an operating farm, with several well maintained dry stone wall cultivation paddocks, and some smaller farmstead stock yards.

Parish of Wollert, part of Crown Allotment 5, south of O'Herns Road:

- On the former *Maryfield* farm:
    - A partly walled irregular-shaped cultivation paddock
    - An irregularly shaped complex of walled stock-yards
    - Archaeological evidence of a former dwelling
    - The substantial walled remnants of the property's north, east and south boundary wall, as per the original survey.

Parish of Wollert, part of Crown Allotment 5, on the Merri Creek, south of O'Herns Road:

- An irregularly shaped walled enclosure, part with ditch, likely a former cultivation paddock.

*B. Large Dairies*:

Parish of Wollert, part of Crown Allotment 5:

- Boundary walls of the Campbellfield Estate (Charles Campbell), including the western extension of Harvest Home Road (in the north), Vearings Road, O'Herns Road (west of the bridge to the Merri Creek), part of the eastern boundary of the former *Maryfield / Clonard* farm, south of O'Herns Road, an eastern boundary wall south of Cooper Street, east of the Wholesale Fruit and Vegetable Market (325D Cooper Street), and part of the northern boundary of the former Wollert township reserve, east of Merri Creek, north of Coopers Road (38 Companion Place, Epping).

Parish of Keelbundora, Crown Allotments 24 and 25

- West of the Hume Freeway (Merri Creek Parklands): an irregular wall along the base of an elongated stony rise.

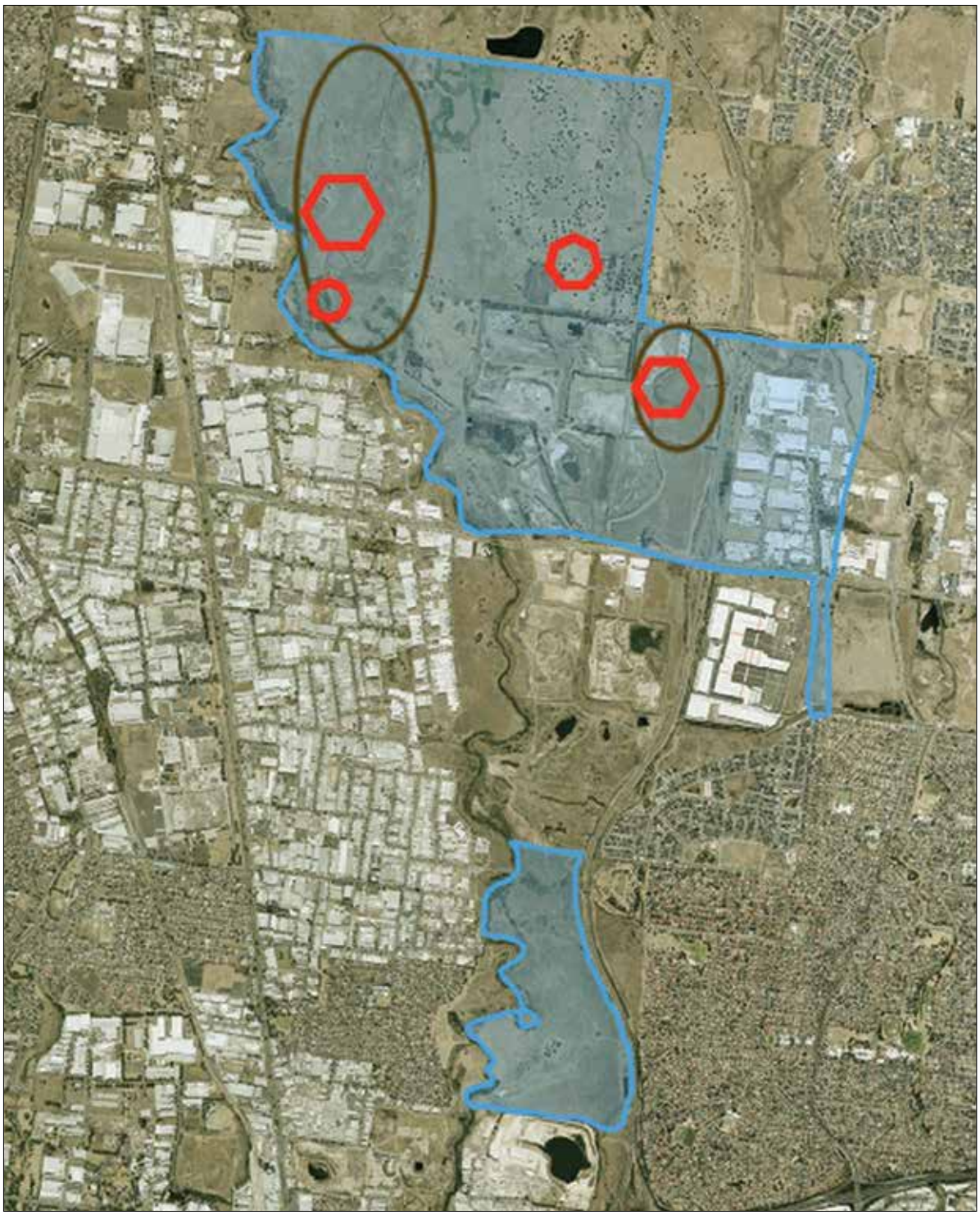

*Image 65: Indicative Campbell Precinct (shaded blue). Charles Campbell's land is north, and Robert Campbell junior's land is south. The ovals mark the sites of the early farming dry stone walls, some of which are potentially associated with the 1840 Argyle Estate. The red polygons are sites with irregular, landscape-formed, dry stone walls that were associated with either semi-enclosed or enclosed cultivation paddock. Some represent multiple enclosures, and one (south) was only potentially associated with a semi-enclosed paddock.*

## A. 'THE ARGYLE ESTATE: PIONEERING PORT PHILLIP FARMING'

### History

*The Pastoral Era*

Explorers and the first settlement era Port Phillip settlers such as JT Gellibrand celebrated the pastoral qualities of the Merri Creek: near Craigieburn John Batman chose two sites there as outstations, while further north the valley was renowned as 'Mercers Vale'. Although Pike's station was a little west of the northern part of the Campbell purchase, there was no known pastoral era settlement on the actual precinct. So, while conceivable, it is unlikely that any of the walls, including those near the Merri Creek, are associated with the early pastoral era. Rather the walls and ruins in this precinct would appear to relate directly to Victoria's early farming history, which had begun by at least 1840 on land alienated by the Crown in 1838, the first land in Port Phillip to be sold for farming.

*The First Farming Area in Port Phillip*

The lands between the Merri Creek and Plenty River were the first 'country' lands to be alienated by the Crown in the Port Phillip district. These freehold allotments were for farming, rather than for pastoral or 'squatting' purposes, which was provided for in the 'Settled Districts' by the issue of annual licences.

Lynette Peel, the historian of early rural industry in Port Phillip, notes that by 1849 only a quite small area of land in the Port Phillip region had been sold. These first sales were along the Plenty River and the Merri Creek.[214]

From 1838 the government sold rural blocks mainly along the Merri Creek at Wollert, the Plenty River near Whittlesea, and the Moonee Ponds Creek near Broadmeadows and Pascoe Vale. In later sales, notably in 1840, the government sold land along the Darebin Creek and the remaining lands along the Merri Creek and Plenty River.[215] Don Garden, the historian of Victoria's sesquicentenary, notes that these areas 'became the major agricultural regions in Port Phillip.'[216]

Peel also notes that Sydney Road, parallel to the Merri Creek, marked the divide between the pastoral and agricultural districts of early Port Phillip.[217] While the land north of Melbourne was sold for farming in the 1840s, the government continued to lease the majority of the land west of Sydney Road to pastoralists. Merri Creek was by far the largest wheat growing district in the vicinity of Melbourne in 1845.[218]

*Wakefield's 'Systematic Settlement' Theory*

The 'Wakefield Theory', says Roberts, 'won over the Colonial Office and became the greatest influence on colonial affairs in the thirties'; his influence brought about the 'experiments of the thirties' regarding land sales.[219]

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[214] Peel, Lynette J, *Rural Industry in the Port Phillip Region, 1835-1880*, MUP, Carlton, 1974, pp.37-38
[215] See eg:- Lands Victoria, Parish and 'Put-Away' Plans (Wollert, Jika Jika, Kalkallo, Yuroke, Toorourrong, Merriang, Keelbundora, Yan Yean; parts of the Parish of Geringhap at Geelong were also subdivided and sold early); Lands Victoria, Roll Plan 104; Peel, *op cit*, p.25; and Scurfield, G & JM, *The Hoddle Years: Surveying Victoria, 1836-1853*, The Institution of Surveyors, Canberra, 1995, pp.73-91
[216] Garden, D, *Victoria: A History*, Nelson, Melbourne, 1984, p.45
[217] Peel, *op cit*, p.20
[218] *ibid,* p.43
[219] Roberts, Stephen H, *History of Australian Land Settlement 1788-1920* (Macmillan, South Melbourne, 1968), pp.84, 93.

During the period of Victoria's first rural land sales, colonial land policy was influenced by this theory, which decreed that Crown land be sold at a 'sufficient price' (meaning imposition of a minimum price) to avoid a proliferation of small farms, and encourage 'gentleman farmers' with capital to purchase and develop the country in an orderly, progressive fashion. At the same time the immigrants whose passage would be funded by the land sales would be employed as laborers on these farms until such time as they could afford to become small landholders themselves.

While the theory was only partially implemented, Port Phillip's first country land sales in 1838, in the parishes of Keelbundora, Wollert and Will Will Rook, were offered in large allotments of up to two square miles (1240 acres, or 500 hectares) each (Image 12). However the great majority of these sites were purchased by speculators and absentee investors, rather than the resident squires anticipated by Edward Gibbon Wakefield. Many of these landowners rented out portions of their vast holdings to the small farmers who had been unable to purchase land sold in expansive parcels. Others subdivided these into small farms, intending to sell at great profit.

Prior to the late 1840s almost all Crown land continued to be sold only in large parcels, meaning that most aspiring independent yeomen had to be content to be tenant farmers. After the gold rush farming land was sold in half or quarter of a square mile parcels in Wollert (1853), and larger small-farming allotments became much more affordable across Victoria from the 1860s with the passing of the Selection Acts.

Instead of only tenanting his property, in 1840 Charles Campbell, who had recently purchased some of the massive new landholdings of Sydney speculators J Terry Hughes and J Hosking, subdivided the property to sell as smaller farming allotments. However the ensuing 1840s depression meant that his purchasers, some of whom had quickly established themselves on their farms, could not make the terms repayments, and had to forfeit their properties. All of the land reverted to Campbell, whose family continued to rent it out until the sale of their 'Campbellfield Estate', from 1912.

Wakefield's theory was only ever partially implemented, and declined in influence during the 1840s. It was completely reversed with the overwhelming influence of the gold-rush immigrants. So a passing phase, a quirk, of history resulted in vast tracts of broad acres being available on the city fringe, between Epping and Campbellfield upon which were established some of the largest nineteenth century dairies in Victoria.

*The Early Crown Sales of Country Land near the Merri Creek*

At the first sale of Port Phillip 'country' land in the parishes of Keelbundora, Wollert and Will Will Rook on 12th September 1838, the average size of land allotments sold was 943 acres, at an average price of 13 shillings two & halfpence per acre.[220]

In the Parish of Keelbundora Robert Campbell junior, of the 'Wharf Campbell' family, purchased Crown Allotments 14, 23, 24 and 26, a total of 3367 acres, of average size 842 acres. The eight Crown Allotments sold in the parish of Wollert, of average size 973 acres, were all purchased by J Terry Hughes & J Hosking, Sydney speculators who separately and together purchased vast tracts of land in the early Port Phillip Crown sales.

[220] Cannon, Michael, MacFarlane, Ian, *Historical Records of Victoria: Surveyors' Problems and Achievements 1836-1839*, Vol.5, VGPO, Melbourne 1988, p.410

While land sold in parcels this size could only ever be purchased by the 'capitalists' and potential squires envisaged by Wakefield, Hughes & Hosking, apparently like most purchasers at the Sydney sales, were speculators. Within a year, in June 1840, they had sold the greater part of their Wollert holding to another Sydneysider, Charles Campbell, Robert Campbell junior's brother, whose commercial wealth was being invested in pastoral estates, including *Duntroon* and *Yarralumla* in Canberra. Charles decided to invest in the burgeoning Port Phillip property market, purchasing the southern portion of Hughes and Hosking Wollert property (5853 acres, being Crown Allotments 1, 2, 3, 5, 6, 7). He immediately set about subdividing the vast property into farms, which he called 'the Argyle Estate'.

The years 1837–1839 were Port Phillip's first 'land boom'. Robert Campbell junior, whose payment of £622 for Crown allotments 23 and 24 was finalised in January 1839, in August was able to mortgage these same two allotments for £2498.[221] Perhaps this was fuelled by the Government raising the 'upset' (minimum) price of Crown land from 5 shillings per acre to 12 shillings per acre on 17th January 1939, although prices being paid at auction had often been well in excess of the minimum price in any case. In February 1842 the upset price was increased again to £1 per acre.[222]

At the end of 1839 the Colonial Office was still expecting prices to continue increasing and Port Phillip property auctioneers were still talking up the boom through 1840 and into 1841.[223] EM Curr, a noted squatter and memorialist of life in early Port Phillip records that in 1839:

> '… a general mental inebriety seized on the people. I suppose that we may say that they were drunk with speculations and visions of wealth. That a man had bought a horse for £100, or a town allotment for £1000 one day, seemed almost to be accepted as a guarantee for their purchaser realising at auction £150 or £1500 on the next; and champagne lunches seemed to be the natural adjuvant and appropriate stimulus to business conducted on such sparkling principles.'[224]

A scan of the early newspapers reveals something of a frenzy of subdivision of the large Wollert (1838) and Kalkallo (1840) Crown Allotments into small farms for the increasing number of arrivals in Melbourne.

In March 1840 an advertisement appeared for the subdivision of the 'Gartur Estate', an 855 acre property on the Merri Creek, south of Summerhill Road. The property would be subdivided into 100 and 50 acre allotments, to suit purchasers. The auctioneer's extravagant global excursion concluded with a prophecy that Melbourne would become 'the greatest republic of this century', and declared that the 'luxuriant' crops on the adjacent Neil Campbell property were proof that 'this part of the country will become the KENT of Australia Felix'.[225] It is not known how many of these allotments were sold, or if any evidence of early occupation might remain.

In May 1841 'the newly arrived immigrant' was advised of the impending subdivision into farm lots of 'the splendid Estate of Hawkville'.[226] This 875 acre allotment had been purchased from the Crown in 1840 by JJ Hawkey, the single allotment east of Merri Creek in the Parish of Kalkallo that had not been purchased by pastoralist John Hunter Patterson. The advertisement told of 'soil of the richest description and lightly timbered', and 'extensive frontage of a never-failing creek of excellent water.' Again, proximity to a well-known and successful farming endeavour, 'the Estate of Kinlochewe', only half a mile away, was prominently cited.

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[221] PROV VPRS 460/P/2921
[222] Peel, *op cit*, pp.36-37
[223] *ibid*, pp.xx, 407
[224] Grant, J, Serle, G, *The Melbourne Scene 1803-1956*, Hale & Iremonger, Sydney, 1983, p.33; see also Kociumbas, *op cit*, p.200
[225] *Port Phillip Gazette*, 7th March 1840
[226] *Port Phillip Gazette*, 26th May 1841.

In the increasingly anxious property market of 1841, other crown allotments, such as the 670 acre 'Estate of Richmond', on the Merri Creek in the Parish of Wollert (apparently CA15, south of Craigieburn Road, east of Merri Creek) were offered for sale whole, as pastoral land. On the opposite side of the creek to one of John Batman's outstations, this property was said to be 'well-known as Mr Thorneloes' old station', and had grass-rights (a grazing license to use of unsold Crown land that was granted to adjacent freehold owners) to the adjacent unsold part of Wollert to its east.[227] By that year, in the deepening depression, John Hunter Patterson had also found that he could not finance his purchase of 15,000 acres in the Parish of Kalkallo, and offered the entire property for sale.[228]

*The Argyle Estate and its Dry Stone Walls*

Charles Campbell's Argyle Estate is of interest for the dry stone walls that survive on and near the Merri Creek, some of which might date to this very early period. Some of these walls appear to be primitive enclosures, either for cultivation or stock, and another a property boundary wall that might also be associated with this early farming period.

The land boom was starting to collapse by time the first advertisements for the estate appeared in May 1840. Undaunted, the advertisements began by declaring (correctly) that it was 'beyond dispute' that the lands 'watered by the Merri, the Darebin and the Plenty' were Port Phillip's preeminent farming land. The property would interest 'farmers', 'recently arrived emigrants' and 'the Melbourne speculators'.[229] The advertisements also appealed to the yeoman idyll of the new arrivals, 'whose first and most anxious care must naturally be the acquisition of a small but independent homestead at an eligible distance from town'.[230]

In August advertisements elaborated on the many natural advantages of the Argyle Estate, which were said to include: 'beautiful springs dispersed over its face … the timber is well adapted to every purpose fencing and home building, while to estimate the richness of its pasturage the stranger has only to look at the large sleek herds of cattle which have made this spot their favourite resort'.[231]

Another advertisement informed that:

> 'The public have been for a long time anxious to have it in their power to purchase small farms, from 50 to 400 acres, well adapted for cultivation, within a short distance of Melbourne. The best judges of soil in this quarter admit that the Argyle Estate is the best qualified they have seen, not only in this district, but in the whole colony for such purposes, from the distance from town (10 miles), its plentiful supply of water, and superiority of soil …'[232]

Less than two years after the land had been purchased from the Crown for some 13 shillings an acre, prices had risen up to nine-fold. 'It is generally known' continued the advertisement:

> ' … that properties immediately adjoining the Argyle Estate have lately been sold – one section for £6 per acre, another for £5, and part of a third for £4.15s…. We know, from undoubted authority, that four guineas cash was refused for 1268 acres of this estate, a few days before the Government sale in June. [233]

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[227] *Port Phillip Gazettte*, 13th December 1841.
[228] *Port Phillip Patriot and Melbourne Advertiser*, 28th June 1841. The property was still being advertised months later.
[229] *Port Phillip Gazette*, 14th October 1840
[230] *Port Phillip Gazette*, 19th August, 1840
[231] *Port Phillip Gazette*, 19th August 1840
[232] *Port Phillip Patriot and Melbourne Advertiser*, 18th August 1840
[233] *Port Phillip Patriot and Melbourne Advertiser*, 18th August 1840

ARGYLE ESTATE.

THE MELBOURNE

AUCTION COMPANY

Have received instructions to submit to public competition, on the 20th of August next, unless previously disposed of by private contract, of which due notice will be given,

THE Splendid Estate of Argyle, comprising

5853 ACRES,

of the finest soil, situated on the Darabin and Merri Creeks, within a few miles of Melbourne.

A Surveyor is now employed in laying this fine property out in farms, of from fifty to five hundred acres, upon which being completed, a full description of each farm shall appear.

This Estate is acknowledged by all who have inspected it, to be the finest in the district.

For further particulars apply to the Manag. ing Director of the Auction Company; or, Alexander M'Killop, Esq., Little Collins-street.

*Image 66: The Port Phillip Patriot & Melbourne Advertiser, 17th May 1840*

On the 29th August 1840 it was advised that plans of the Estate subdivision:

> 'are now hanging up for inspection in the rooms of the Melbourne Auction Company. They are most tastefully arranged, and the beautiful country which they compose is well developed, situate between and on the two favourite creeks – the Darebin and the Merri, with a constant supply of the finest water. Around the Government Village Reserve the lots comprise ten acres each, and there is no doubt the competition for this ground will be the greatest that has taken place in Melbourne for months.'[234]

The sale was originally proposed in August but postponed until 16th October 1840. Instead of extolling the values of the land for its rural purposes, the advertising began to speak directly to the expected continuation of booming property values. A final advertisement targeted the newly disembarked, exhorting:

> '... speculators and others who have recently arrived, and may be desirous of investing their capital in property, to purchase that, the value of which is ascertained, rather than speculate in Government Land, which if not previously inspected, may turn out to be almost valueless.[235]

[234] *Port Phillip Patriot and Melbourne Advertiser*, 29th August 1840
[235] *Port Phillip Patriot and Melbourne Advertiser*, 15 October 1840

Advertisements concluded with the announcement that: 'For the convenience of the public, a tent will be pitched opposite to the Mart, where a splendid Lunch will be provided for the occasion.'[236]

Only about half of the estate was sold at the auction.[237] Although held as the boom ended and a recession loomed, the advertisements appear to have worked in terms of price. The records show that the purchasers of land on the Merri Creek (on which dry stone walls are situated now) paid £4 or £5 per acre.[238] (The conspicuous exception was Campbell's fellow-squatter James Malcolm, who paid only £2.10 per acre for land immediately adjacent to these properties.[239])

The advertisements had targeted both the speculator and aspiring yeoman, and it is likely such prices were beyond the capacity of people of genuinely small means. A number of the purchasers of Argyle farms gave themselves the honorific 'Esquire' or described their occupation as 'Gentleman'.[240] One, David Kelsh, the Melbourne postmaster, may never have lived on the property, but was perhaps one of the middle-class swept up into land speculation.[241] Another, John Alston, would later fall back on his brothers-in-law, who held a near monopoly on the pastoral runs of the Upper Murray from Tintaldra to the river; later he himself held the Wermatong pastoral lease on the Upper Murray.[242] Later again, in 1849, various records show him as living in Albury and an agent for the Argus newspaper.[243]

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[236] Eg, *Port Phillip Gazette*, 24/7/1840, 14/10/1840; *Port Phillip Herald*, 16/10/1840; *Port Phillip Patriot and Melbourne Advertiser*, 18th August 1840

[237] PROV, VPRS 460/P0/2723, Torrens Application 26860, 1844 note by Charles Campbell.

[238] PROV, VPRS 460/P0/2723, Torrens Application 26860, various contracts of sale.

[239] James Malcolm, of *Olrig* at Mt Ridley, began at Port Phillip as a flockmaster in 1836, soon took up land in the vicinity of Yuroke and Merriang, and acquired extensive landholdings throughout the colony such that by 1851 he was, by one account, the largest individual sheep-owner in Victoria; de Serville, P, *Port Phillip Gentlemen and Good Society in Melbourne before the Gold Rushes*, OUP, Melbourne, 1980, p.146; Symonds, IW *Bulla Bulla: An Illustrated History of the Shire of Bulla*, Spectrum, Melbourne, 1985, pp.28-9

[240] PROV, VPRS 460/P0/2723, Torrens Application 26860, Charles Campbell & John Alston contract of sale.

[241] PROV, VPRS 460/P0/2723, Torrens Application 26860, David Kelsh letter.

[242] Peck, HH, *Memoirs of a Stockman*, Stock and Land, Melbourne, 1972, pp.303-322; Henwood, J, Swann, M (eds), Smithwick, CA, *Early History of the Upper Murray*, 1995, pp.x, 49; Carmody, J, *Early Days of the Murray River*, pp.3, 5; Andrews, A, First Settlement of the Upper Murray, pp.118, 146; Mouritz, JJ, The Port Phillip Almanac, 1847, p.56.

[243] *The Argus*, 11th July 1849; research undertaken by John Waghorn, Whittlesea Historical Society, for Tom Love

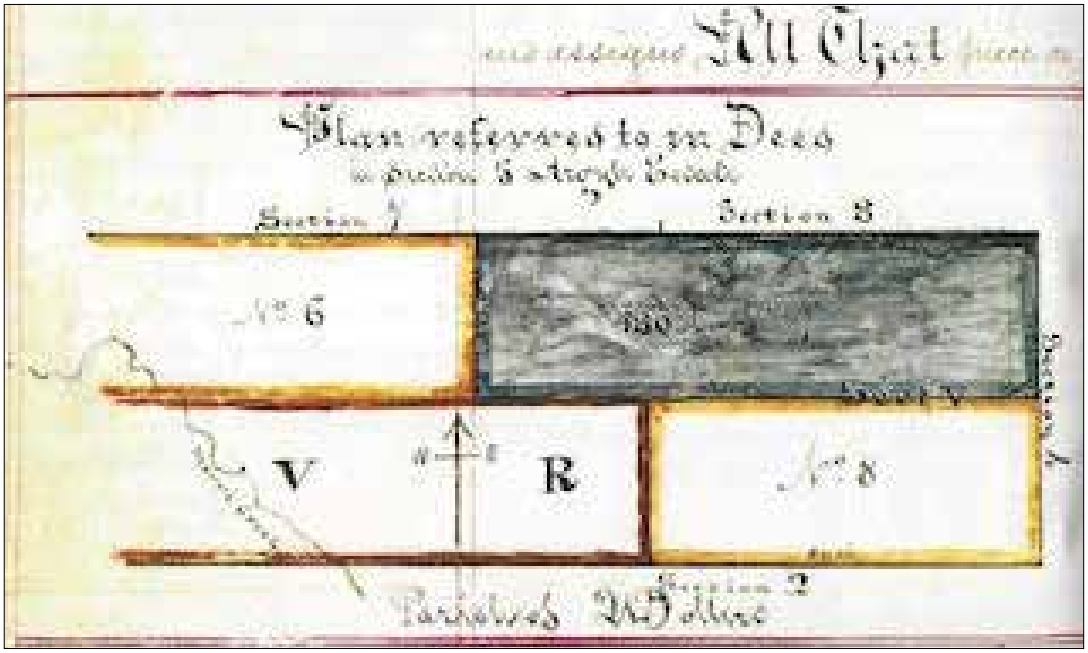


*Image 67: Extract from 1840 contract for sale to John Alston of a 480 acre allotment in Charles Campbell's Argyle Estate. The dark area marked, in Crown Allotment 5 Parish of Wollert, became the Alstons' Maryfield. Its northern boundary is now O'Hern's Road. (Torrens Application 26860) Its northern and eastern boundaries were also the boundaries of Charles Campbell's extensive and long-lasting Campbellfield Estate.*

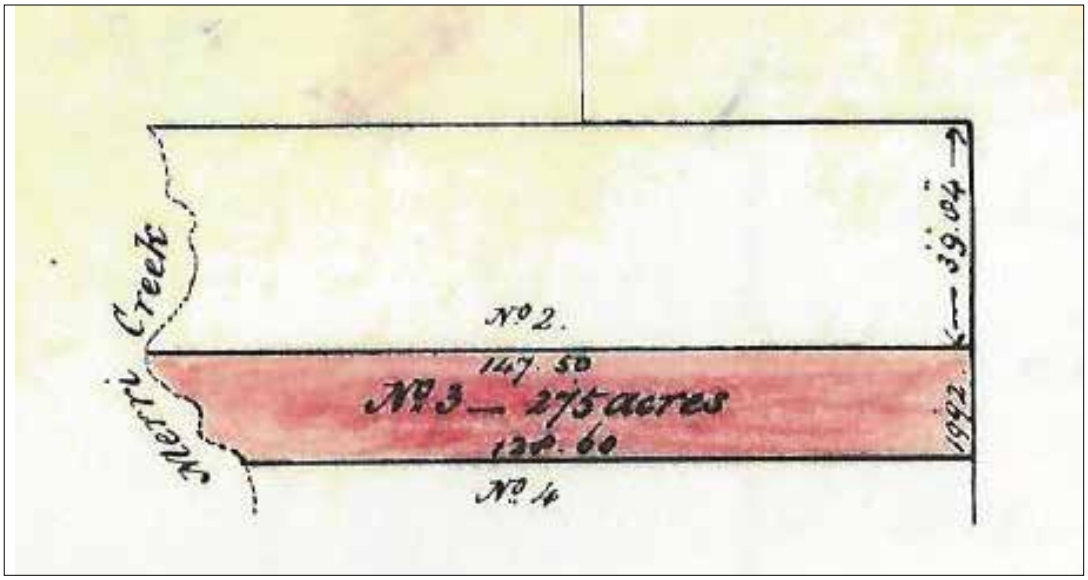


*Image 68: Extract from 1840 contract for sale to James Malcolm of a 275 acre allotment in Charles Campbell's Argyle Estate. The larger area marked is Crown Allotment 7, Parish of Wollert, which is the location of the three paddocks and other stone structures north of O'Hern's Road. Lot 'No.4' was purchased by Robert Stewart, and the unmarked top allotment No.1 was purchased by Hector McCrae, both of whom forfeited their purchases, unable to meet the mortgage repayments. (Torrens Application 26860)*

In 1839 Alston is recorded as having been a subscriber to the Presbyterian school in Melbourne; his £2.2.0 was substantial, only 14 of the 131 subscribers donating more.[244] In April 1841 he appears as a subscriber to the 'Scot's Church'.[245]

Alston was a settler rather than a speculator, and moved to Argyle straight away. In July 1841 he posted a reward of £2 for the return of a 'Roan Mare'. In November 1842 the *Port Phillip Gazette* reports that imports arriving from Glasgow on 7th November included '1 box stationery for J Alston;' he was clearly not without means, and perhaps more a gentleman and scholar than a farmer.[246]

He named his 480 acre property *Maryfield* after his wife Mary Hervey. Alston's *bona fides* had been evident in the 25% deposit he paid on his land, whereas he was only required to pay 20%; some only paid 10%. He and Mary move on to the property straight away, and began raising a family and settling into the community. Two children were born at *Maryfield*: John Hervey Alston in 1841, and Margaret Scott Alston in 1842.[247]

On the 21st March 1841 census collector McLaughlin recorded the family and workers living on *Maryfield* on the Merri Creek, in an 'unfinished' house of 'wood'. Five adults, aged 21-45, one a woman, resided on the property. Their religions were Church of Scotland (John and Mary), and three Roman Catholic (perhaps Irish farmhands).[248] In 1842 the Port Phillip Directory also recorded John Alston 'settler' at Merri Creek.[249]

John was quick to make his mark in the local community. In March 1842 the *Port Phillip Gazette* records him as 'secretary and convenor' of a meeting of Presbyterian residents at Campbellfield which founded the third Scots Church in Victoria. The meeting's chairman was the Rev James Forbes, while Alston was the leading layman of the budding congregation.[250]

At this stage cattle grazing was a leading use of the land, as cited in the 1840 advertisements for the estate.[251] Two years later a property being sold on the Darebin Creek side of the estate reported on an adjoining run 'capable of carrying 300 head of cattle.'[252] Stone-free arable cultivation portions of the land were also cropped, probably with wheat, which dominated in the area at that time, or oats.

The first boundary fencing may have been substantial, post & rail or stone wall. The Argyle estate farmers may have been better capitalised than the many who made-do at the time with 'make-up' or 'bush' fencing of stacked logs or branches. By mid 1842, on the Darebin Creek side of the estate one settler had 216 acres 'wholly enclosed with post and rail fencing'.[253] *Maryfield* (later *Clonard*), on O'Herns Road, was mostly covered with stone, and some fencing would likely have been dry stone walls, especially over stony ground where posts were difficult to set. Internal fencing to protect crops from stock might also have tracked stony outcrops around 'cultivation paddocks', as had those which appear on 1840s maps in Keelbundora, just 3 kilometres south. With four men working on the property, internal paddocks for cropping would have been a priority, and it is certain that at least a start would also have been made on dry stone wall and/or post & rail boundary fencing. Some cultivation paddock dry stone walls remain on the property today, together with stock yards, and the stone and brick fragments of an associated former dwelling.

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[244] Cannon, M, MacFarlane, I, *Historical Records of Victoria, Vol.3*, VGPO, Melbourne, 1984, pp.505-521
[245] *Port Phillip Gazette*, 28th April 1841 (per Mr Ken Smith)
[246] *Port Phillip Gazette*, 9th November 1842 (per Mr Ken Smith)
[247] Birth Deaths and Marriages Victoria, 'Pioneers Index' (information provided by John Waghorn).
[248] PROV VPRS 85, Units 1 & 2, '1841 NSW Census Returns'.
[249] Information researched for Tom Love by local historian John F Waghorn.
[250] *Port Phillip Gazette*, 23rd March 1842.
[251] *Port Phillip Gazette*, 19th August, 1840; also eg, *Port Phillip Gazette*, 2nd September 1840, p.4
[252] *Melbourne Times*, 26th June 1942
[253] *Port Phillip Gazette*, 25th June 1842

In the meantime the economy had begun to plunge into depression. Land prices began to fall at the end of 1841.[254] By 1843 squatter George Russell lamented that there was 'no money, no credit, no trade, nothing but failures … Land is worthless, and cattle and sheep little better.'[255] The roll-call of insolvents was studded with Melbourne's illustrious settlers.[256]

Early signs of trouble at Argyle appeared in May 1841 when one of the settlers lodged the following notice in a newspaper:

> 'The purchaser of about 400 acres of the famous Argyle Estate, being about cultivating and improving 200 acres, is willing to dispose of the remaining half, leaving four-fifths of the purchase money at 10% interest for 5 years.'[257]

In July 1841 settler David Kelsh wrote to Campbell attempting to renegotiate his purchase:

> 'Sir, Being one of the persons who bought a portion of the Argyle Estate which you sold in Melbourne some time ago by public auction, I beg to inform you that since that time such has been the depression of the money market and so great and unforeseen has been the decrease in the value of property that I am sorry to be obliged to say that I shall find it impossible to comply with the terms of sale or pay off the entire amount of your purchase money as agreed upon. I therefore trust you will accede to the proposition I now make and which I feel assured is the utmost with which I shall be able to comply, namely to retain 150 acres at the price at and on the conditions agreed upon and return the remaining 270 acres.
>
> ... I assure you from the present state of affairs here and my salary being very small as postmaster I find it as much as I can possibly manage to support myself and my family in Port Phillip ... Hoping you will have the goodness to comply with my request and relieve my mind from heavy debt which I find would be impossible for me to pay'.[258]

In 1839 Kelsh had been appointed Melbourne's first fulltime official postmaster. At that time his salary was a commission on postage handled, and in his first year he made only £120 and had to incur considerable unexpected expenses in association with the job. In 1840 he made nearly £330, which probably encouraged his Argyle purchase. However LaTrobe, while commending Kelsh's performance, recommended a set salary of £200 per annum instead of the commission system.[259] So in 1841 his income suffered a major reversal, his property's capital value was plummeting, and he still owed Campbell approximately £100 per annum in interest alone.

The only record of Campbell's reply is a note entitled 'Land at Melbourne', dated 13th April 1844, which was addressed to 'Gentlemen' (probably his own mortgagees, who at times included his brothers).[260] Its list of Argyle Estate mortgagors states simply in relation to Kelsh – 'almost insolvent'. Of the eleven purchasers, four others were similarly described, another two were described as 'worth nothing', while two were described as 'good'. One of the latter, the nearby pastoralist James Malcolm, was authorised to let the properties of any of the purchasers who hadn't been paying interest. He is also the nominated agent for the attempt by Campbell to sell the properties in 1849, so evidently did manage the sites in the 1840s.

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[254] Shaw, AGL, *A History of the Port Phillip District: Victoria Before Separation*, Miegunyah/MUP, Carlton South, 1996, p.163
[255] *ibid*, p.169
[256] *ibid*, pp.165-166
[257] *Port Phillip Patriot and Melbourne Advertiser*, 17th May 1841
[258] PROV VPRS 460/P/2723, Torrens Application No.28680. Letter David Kelsh to C Campbell Esq, 17th July 1841.
[259] Cannon, M, MacFarlane, I, *Historical Records of Victoria, Vol.4: Communications, Trade and Transport*, VGPO, Melbourne, 1985, pp.530, 592.
[260] PROV VPRS 460/P/2723, Torrens Application No.28680, Note, Charles Campbell, 13/4/1844.

In 1842 a 'gentleman' returning to England was trying to sell his Argyle farm on the Darebin Creek. The property, of 416 acres, was half enclosed with post and rail fencing, and had a six room cottage and a kitchen.[261]

The home and community life being built by the Alstons at Campbellfield also came to an abrupt end. Campbell's 1844 note in relation to Alston was: 'given up and let for £50 per annum'. This probably means that Alston had left the property and either that that Campbell was letting it to Malcolm, or that Malcolm was Campbell's agent, and was letting it out. Electoral Rolls for the 1840s show Alston as owning a 'dwelling house' at 'Merri Merri Creek' between 1843-1845 (which dates almost certainly incorporate lag-time); by 1848 a son was born to the Alstons on the 15,000 acre Wermatong pastoral lease on the Upper Murray, and in 1850 a daughter was born at Albury.

Under the original Argyle contracts the purchasers' half-yearly payments on their balances would have been completed in 1847. In 1849 Campbell published newspaper notices informing Robert Stewart, Henry McCrae, Duncan Cameron and John Alston of his intention of foreclosing on their loans and resuming the properties if all outstanding capital and interest was not paid within six months.[262]

## Dry Stone Walls on the Argyle Estate Sites

In June 1849 an advertisement appeared for the sale of 2487 acres of 'farms on the Merri and Darebin Creeks, Sydney Road etc', 'nine miles from Melbourne'.[263] This was the Campbell estate, as it noted four farms from 230 to 280 acres, on CA7, Parish of Wollert, and another of 480 acres on CA5. As with the Argyle Estate this sale was unsuccessful, as the Wollert 'Campbell Estate' remained 5294 acres in the early twentieth century.

Two of the farms on the Merri Creek referred to in the 1849 sale had been sold to Stewart and McCrae in 1840, while another had been sold to Malcolm at half the price. Another, on CA5 nearby, was Alston's *Maryfield*.

Critically, the advertisement added that 'Portions of the above lands have been under cultivation and are fenced in'. It is certain then that internal walls – 'cultivation' paddocks 'fenced in' to keep stock off crops – had been built on these properties in the 1840s. Given the stony nature of the land, it is likely that this fencing would have been in the manner of the 'cultivation' enclosures shown in the 1840s Keelbundora plans, some three kilometres south. That is, of stone walls at least on the stony outcrops, and perhaps lighter timber fences on softer ground.

It is also of note that two of the 'cultivation' enclosures shown in the 1840s Keelbundora plans have a 'hut' marked in association with them. The northern paddock on CA7 is also adjacent to the foundations of a dwelling.[264] Although this northern enclosure has not yet been inspected, it also appears to be similar to the former *Maryfield*, whose dry stone wall cultivation paddock and stock yard complex also retains archaeological evidence of a hut.

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[261] *Melbourne Times*, 26th June 1842.
[262] *The Melbourne Morning Herald*, 16th June 1849
[263] *The Melbourne Morning Herald*, 16th June 1849
[264] Hall, 1989, *op cit*

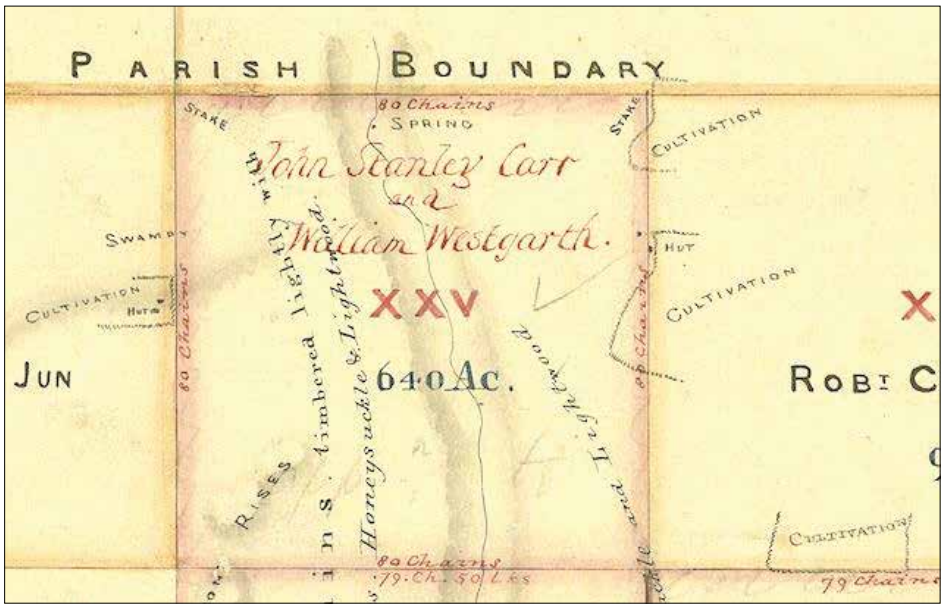


*Image 69: Crown Allotment 25, Parish of Keelbundora, within two miles of the stone walls on the former Argyle Estate. Like the earlier Roll Plan 104A 'Melbourne Surveyed lands Northwards', this plan shows the 'cultivation' enclosures, two of which have an associated 'hut',and also a 'spring.' One presumably notable 'Stony Rises' is also indicated. (The 1850 Crown grantees – John Stanley Carr and W Westgarth – have been added to the map later.) (PROV Historical Plan: Sydney K7, 1848)*

The early partly walled irregular cultivation paddock on the former *Maryfield* appears to have been used by the Bunting / Love families in the early-mid twentieth century, although they soon built a new cultivation paddock near O'Herns Road that was substantially enclosed with post & wire fencing, and left the old partly enclosed dry stone wall enclosure as it was. While its condition is dilapidated as would be expected, its extensive plan would appear to remain intact. The documentary evidence suggests that the internal dry stone walls that remain in that place today date to the 1840s, and likely to 1841–1844 during the Alstons' occupation.

The three enclosures on the Merri Creek CA7 overlap the boundaries of the four 1840 allotments, so it is unlikely that they (or at least the northern one) were built by the Argyle Estate settlers. In 1844 however James Malcolm had been given permission by Campbell to let the allotments of defaulters on interest repayments, including his neighbours on CA7: Stewart, described by Campbell as 'worth nothing', and McCrae, described as 'almost insolvent'.

We know from Rev John Dunmore Lang that in addition to being one of Port Phillip's largest graziers, James Malcolm was also in 1843 its largest cultivator of soil.[265] Malcolm is said to have been the leader of the Kinlochewe tenant farming settlement between Mt Ridley and Merri Creek, which in the 1840s reputedly had a population of 400. While this was near his *Olrig* home station, Malcolm's property interests were extensive, and not confined to the immediate Kinlochewe district.[266] It is possible that the three cultivation paddocks on CA7 and the other one on the Merri Creek immediately south on CA5, were established by James Malcolm, or other tenants, in or from the mid 1840s.

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[265] Lang, John Dunmore, *Port Phillip, or the Colony of Victoria*, Glasgow, 1853, pp 293-4.
[266] For example in 1849 he is found letting properties on the Darebin Creek, the Merri Creek, and Mercers Vale (*Argus*, 1st May 1849)

Another possibility is that these CA7 complexes date at least partly to the 1850s and 60s, or even to later Campbell leases of these properties to Baker. Newspaper and ratebook records reveal that the sites were occupied by small dairy and sheep farmers until the 1880s.

Heinrich (Henry) and Carl (Charles) Ziebell, sons of Christian Ziebell, the leader of the Mecklenburg settlers at Westgarthtown, are recorded as having married and established farms at 'Somerton'; Carl later established a smallgoods business.[267] The oldest surviving ratebook (1863) show that Charles and Henry were at that time each leasing 550 acres of CA7, Parish of Wollert from Campbell.[268] This represented the whole 1065 acres of CA7, from the Merri Creek to Vearings Road. It was marked as a 'farm' in the 1868 ratebook, suggesting that either or both of the brothers had been living on the property, perhaps since the 1850s.

In about 1873 however Charles moved to a 300 acre dairy farm at nearby Sydney Road, in a location usually described as Somerton (but sometimes as Craigieburn).[269] In February of that same year he sold his very substantial 'Somerton' dairy herd of some 95 cattle, as well as dairy equipment. But no land was advertised for sale.[270]

This was likely to have been his farm on the large 'Agyle' property (c.550 acres of CA7) that he had been leasing from Campbell.

By this stage Henry Ziebell had diversified, establishing a smallgoods factory at Somerton – 'Messrs Ziebell's Bacon and Sausage Factory' – that was highly regarded in Melbourne.[271] However he appears to have kept his Argyle property until his death in November 1880. A few months after his death there was a sale of his 23 dairy cows and dairy equipment.[272] Neither did this include land, suggesting that it was Campbell's leased CA7 property.

It is likely that Henry was living nearby at Somerton, near his German smallgoods factory rather than on CA7. Confusing ratebooks suggest that he may have sublet this property out. Entries associate Henry Ziebell with Christian Seeber and David Knopp, and then with Michael and John Creed, on CA7, although some of these names are known to have lived or rented on CA8, immediately east.[273] It is possible that some or all of these were at one stage subletting Henry Ziebell's portion of CA7. It is likely that Charles Ziebell occupied the Merri Creek half of CA7 acres (where there is evidence of sheepfolds as well as dwellings), so Henry Ziebell (and perhaps sub-leasees) may have occupied the Vearings Road end. This would explain the cultivation paddocks at this east end of the property, which were there when the Vearing family arrived at the property in about 1920.[274]

Although he had moved to Somerton, Charles Ziebell also continued leasing CA7 until 1882 (the rate record had attributed the full 1000 acres to him since Henry's death in 1880).[275] His giving up the lease may have been related to his announcement in April 1881 that he would be taking over his late brother's smallgoods business ('at Craigieburn').[276] Between 1875, a year or two after he moved his dairy farm to Sydney Road, and 1882, 'C Ziebell, Craigieburn' had appeared in the reports of the Melbourne Markets, selling 15 bales of crossbred wool, or 300 merino ewes, or 200 shorn fat lambs.[277] It would appear that he was dairy farming on Sydney Road, and running sheep on his former dairy farm on CA7 until he took over Henry's smallgoods factory. An 1887 lease records that Charles' lease had by this stage been taken over by dairy giant Thomas Baker.

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[267] Wuchatsch, 1985, *op cit*, p.36
[268] PROV, VPRS 14601/P1/3, Shire of Epping Ratebooks, 1863 - 1871; Shire of Darebein Ratebooks, 1873 - 1887.
[269] *The Australasian*, 12/2/1887
[270] *The Age*, 1/2/1873, 7/2/1873
[271] *The Australasian*, 12/2/1887
[272] *The Age*, 17/11/1880; *The Australasian*, 19/3/1881
[273] Jennings, Sheehan, 2000, *op cit*, pp.14-18; PROV, VPRS 14601/P1/3, Shire of Epping Ratebooks, 1863 - 1871, Shire of Darebin Ratebooks, 1873 - 1887
[274] Personal conversation, Mr Lyn Vearing, *Hendon Park*, 7/11/2019
[275] PROV, VPRS 14601/P1/3, Shire of Darebin Ratebooks, 1873 - 1887.
[276] *The Age*, 4/4/1881
[277] *The Age*, 27/11/1880, 21/1/1882; *The Australasian*, 27/11/1875, 6/1/1877, 12/1/1881, 19/3/1881; *Weekly Times*, 1/6/1878

Campbell had been renting out Alston's *Maryfield* since 1844, and in 1849 a farmer Garret Barry rented part of the Argyle Estate for several years.[278] His later lease plans show that numerous other smaller farms were occupying the estate prior to Morgan and Baker. Baker's 1880 lease, for example, amalgamated portions of land 'lately in the occupation of' Frederick, John, and Charles August Winter (570 acres), Donald Geddes (258 acres), Hay Lonie (211 acres), and John Dow (69 acres). The next lease (1887) incorporated land previously let to Charles Ziebell, and John Kerr. Morgan's 1881 lease showed that he had taken over tenancies previously held by Thomas Goodman, Richard Goodman (on CA5), and Hay Lonie.[279]

The earliest surviving Campbell lease contract, with Frederick Winter, dates to 1858. Winter's address and occupation is given as 'Parish of Wollert, farmer', so he may well already have been in occupation of the property.[280] The seven year lease was for £156 per annum.[281] The lease included a special clause requiring that Winter:

> '… during the said term hereby granted at his and their own cost erect a good and substantial stone or post and rail fence on one moiety of each of the four principal boundaries of the said land hereby granted…'.

In 1891 statutory declarations by neighbours as part of Frederick Campbell's application for a title attested that the 'fences and walls' marked on the surveyors plan, including the northern and eastern boundary of *Maryfield*, had been 'first erected in their present position more than thirty years ago and have remained unaltered except when from time to time repairs have been necessary and which were made on the line of the old fences'.[282]

A plan prepared at the time of subdivision of the Village Reserve in 1866 by John Hardy also shows the shared southern east-west portion of the *Maryfield* dry stone wall was erected by then.[283]

*Maryfield* boundary walls were built then in their present form sometime between 1858 and 1860, likely soon after 1858. Half the cost was paid by Winter, and the other half presumably by Campbell. Intact parts of this wall may have been professionally built (although the eastern boundary has a small kink in it).

Part of the reason for leasing the exact former property of Alston may have been that there was already in existence some substantial form of boundary fencing on this property. The establishment of boundary fencing in particular was a high priority for pioneering farmers, and as we know that Alston employed three men, and was intending to establish his family on the property permanently, it is certain that he would have at least made a start on building fences or walls on the property. It is probable that at the very least a substantial start had already been made on the 'good and substantial' post & rail or stone boundary fence that was formally required by Campbell. It may however have been relatively rudimentary, and in need of substantial upgrade or repair by 1858.

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[278] PROV VPRS 460/P/2723, Torrens Application No.28680: statutory declaration, William Barry, 2/12/1891.
[279] PROV VPRS 460/P/2723, Torrens Application No.28680.
[280] PROV VPRS 460/P/2723, Torrens Application No.28680: Lease, Charles Campbell to Frederick Winter, 1st May 1858. Winter's original home in nearby Germantown was in the Parish of Keelbundoora.
[281] PROV, VPRS 460/P/2723, TA26860: Indentures: 24/12/1840 and 26/1/1841 between Charles Campbell and John Alston, and Indenture 1/5/1858, between Charles Campbell and Frederick Winter.
[282] PROV VPRS 460/P/2723, Torrens Application No.28680: statutory declarations from neighbours William Canning, James Darmody, Donald Fullerton, William Barry, and Ross Watt.
[283] Lands Victoria, Put Away Plan W188A, December 1866

Frederick or 'Friedrich' Winter had arrived in Melbourne from Mecklenburg in February 1850 on the ship *Pribislaw* with 198 others who were part of William Westgarth's scheme of German immigration to Victoria. The Winters were one of the original and enduring settler families on the 'Westgarthtown' (or Germantown) Estate at Thomastown.[284] After adding to his original 50 acres at Westgarthtown, Winter leased this land to a neighbour and had moved to the 480 acres *Maryfield* property by 1858.[285] Winter was residing on the property at the time of his death in 1866, aged 55.[286]

Other documents reveal that prior to 1880 John Winter and Charles August Winter (presumably Friedrich's sons) had increased the land leased from Campbell to 570 acres. The Winters' clearing sale in 1880 reveals that they had been dairy farmers, with 60 cows and two bulls, four draught horses, and 14 pigs, which suggests that they were making butter rather than selling fresh milk.[287] They also had a 'corncrusher' and 'chaffcutter' for the processing of maize and hay that would have been grown in the farm cultivation paddock or paddocks.

In the lease of the Winter farm to Morgan in 1880, there is no reference to a 'dwelling house' on the property, as occurred with the other former tenements, but merely to 'appurtenances'.[288] Frederick's widow Maria Winter and her family may already have moved back to their original house at Westgarthtown (where she died in 1898).[289] Whether or not they had once lived in the dwelling of which there is evidence next to the stock yards and cultivation paddock, it would appear that by 1880 there was no habitable dwelling on the property. Similarly, in the 1891 Campbellfield estate survey, none of the four 'farm' dwelling sites marked are on the 1840 Argyle Estate land, although evidence of early dwellings survives today on *Maryfield*, and the CA7 site on the Merri Creek.[290] The evidence then is that these dwellings, if still standing, were definitely uninhabited by 1891, or 1880 in the case of *Maryfield*. This suggests that they were unlikely to date to the tenancies of Baker and Morgan in the 1870s. Alternatively they may have been small and rudimentary farm labourers 'huts' built for farmhands of Baker or Morgan, which the surveyor did not rate as a substantial 'farm' house.

The dry stone walls that survive on some of the north, and (it appears) something of the eastern, boundaries of John and Mary Alston's *Maryfield* may preserve something of the 1840 boundaries of that property. They are rare, and possibly the oldest surviving farm boundaries in Victoria.[291] While the dry stone wall on the northern boundary is known to have been rebuilt in the 1850s as a result of the creation of O'Herns Road, it still delineates that boundary. Parts of the remnant eastern *Maryfield* boundary dry stone walls still preserve that Campbell boundary.[292]

Alternatively it is also possible that the cultivation and stock paddocks, and dwellings, date to the 1850s-60s rather than the 1840s, Archaeological investigation might help answer the question of date, and whether they were used by families or workers.

It is possible that the fabric of the sites dates to successive periods from the 1840s to c.1882. If the enclosure walls or former dwelling sites date to the first farming era in Port Phillip, they are of the highest historical significance. If any of the enclosure walls are cultivation paddocks pre-dating the early 1860s, when this part of the City of Whittlesea was the most important district of wheat cultivation in Port Phillip, their historical significance and heritage potential would be further enhanced.[284]

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[284] Wuchatsch, 1985, *op cit*, pp.1, 18, 19, 90.
[285] *ibid*, p.38.
[286] *ibid*, p.38.
[287] *Australasian*, 21st February 1880
[288] PROV VPRS 460/P/2723, Torrens Application No.28680: Lease, Charles Campbell to Thomas Harrison Baker, 1/5/1880.
[289] Wuchatsch, 1985, *op cit*, p.38
[290] PROV VPRS 460/P/2723, Torrens Application No.28680: 'Plan of Portions 1 & 2, Pt of 3 & 5, Pt of 6 & 7', 1891
[291] See David Moloney, 'Heritage Assessment of Clonard, 275 O'Hern's Road Epping', October 2009.
[292] Present roadworks have demolished the eastern end (east of the freeway) of the northern *Maryfield* boundary wall.

## Comparative Assessment

- Asymmetrical Dry Stone Walled Cultivation Paddocks

  Other stony rise areas of Victoria have been surveyed using satellite views and early twentieth century Ordnance maps, to ascertain the extent of other such landscape-moulded cultivation paddocks in Victoria (Chapter 8). Some spectacular examples have been found, although nothing comparable in terms of the number and extent of cultivation paddocks. As farming in these areas was generally established in the mid-late nineteenth century, it is also unlikely that they would compare with the walls in this precinct in terms of a possible 1840s date. The form of the O'Herns Road walls, in particular their small size, would also appear to fit an early date, when it was economical to farm such small areas of cereal crops.

  The completely freeform and completely enclosed form of the paddocks in this precinct, without any straight lines, and unmitigated by cadastral or later farm economies, also appears very rare at the state level.

  This fully enclosed freeform style of wall is even uncommon within the Whittlesea cultivation paddocks. Similarly the association of cultivation paddocks with stock-yards, and a dwelling, appears to be rare in Whittlesea.

- Early Farm Boundary Walls

  The *Maryfield* dry stone boundary wall preserves most of the 1840 boundary and plan of one of the first farms in Victoria. It provides very rare evidence of an 1840 farm in Victoria. It is the oldest known farming allotment in Melbourne or Geelong whose boundary is still well-defined.

  The only other known pre-1843 farm boundaries that are preserved by dry stone walls are in the Rutledge Special Survey at Kilmore, whose wall was built considerably later, c.1870. A substantial portion of the western boundary of the Atkinson Port Fairy Special Survey is also marked by a dry stone wall (which was probably built c.1855-70). This wall does not describe an early farm however.[293]

  The only other known dry stone walls associated with any pre-gold farming subdivisions in Victoria are the much smaller and less intact dry stone walls associated with John Pascoe Fawkner's 1849 land buying co-operative at Tullamarine, and the William Westgarth Germantown Lutheran cemetery and church at nearby Epping, which was settled c.1850.

## Discussion: Development and Dry Stone Walls on the Argyle Estate

It is conceivable that the evidence of a hut and walls on the Merri Creek sites is from the short pastoral era, prior to Crown alienation in 1838. However there is no evidence at all of settlement on these sites prior to Crown land sale. While there has been identification of what might possibly have been fabric of a sheep wash on the Merri Creek in this area, nothing of this nature was identified in this portion of the Merri Creek.[294] In view of the scarcity of fabric on other pioneering-era pastoral waterway sites in Port Phillip, it seems unlikely that the stock yards or holding yards near the Merri Creek date to this 'first-settlement' period.

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[293] Moloney, David, 'Heritage Assessment of Clonard, 275 O'Hern's Road Epping', October 2009, pp.51-74
[294] Hall, 1989, *op cit*

From early newspapers and advertisements for the Argyle Estate we know that in 1840 cattle grazing was a primary farming pursuit in this vicinity. We know from other records that, as had been intended by the Government, this was also a major cropping district in the early decades. We also know that this was followed by dairying from the 1850s, and especially from the early 1860s. On the other hand, there is no documentary evidence of sheep grazing on the small farms, either tenant or freehold, in this region. In fact, small flocks of sheep rotating with crops – mixed farming – only commenced late 1860s to early 1870s in the Port Phillip District.[295]

The remains of six stone wall enclosures near Merri Creek – four on CA7, and two on CA5 (one in the City of Hume) and another on the former *Maryfield* farm, all on or near O'Herns Road, appear to be either cultivation paddocks or stock yards associated with early farming in Port Phillip, llkely dating from c.1841 to the early-1860s, when wheat and other cereal crops in this area were grown in small paddocks protected from cattle by stone walls, and the harvest processed in Merri Creek mills.

In early 1841 Alston was building a timber dwelling, suggesting that the ruins of what appears to be a stone dwelling on that property would not date to him. It may date to the Winters, or a farm hand of the Winters. Or it may have been a later stone extension of the original Alston dwelling. Or else the timber dwelling might have been the initial part of an original composite dwelling, similar to that built by a settler on a distant part of the Argyle Estate, whose dwelling was described as being 'built partly of stone and partly of wood, and highly finished.'[296] Similarly, the small dwelling on the Merri Creek sites may have been an 1860s, or an original, more primitive 1840s dwelling. Archaeological investigation might provide more certainty. It is unlikely that these dwellings were associated with Campbell's later dairy tenants, Baker or Morgan.

Roger Hall identifies the Merri Creek site, which he calls 'Farming Complex' (WS4) and the associated 'Ford' (WS4a) in his 1989 preliminary archaeological survey of the Merri Creek from the Yarra to Craigieburn Road. With Dights Mill on the Yarra these are the only 'historical' archaeological sites that he assesses as being of both 'high' scientific and 'high' cultural significance. He recommended WS4 for inclusion on the (then) Historic Buildings Register.[297] The site is included now in the Victorian Heritage Database (Place ID8713, H7822-0067).

Hall describes WS4 as 'a complex of dry stone fences, pens, mud and stone dwellings and out-buildings covering about 11 ha'. The complex is quite extensive, with a 'minor' dwelling, which he postulates was a 'shepherd's hut' associated with a 'sheep pen' adjacent, and a sizeable 'major dwelling' with yards. There is evidence of a 'special roofed shelter' and a cobbled floor with drains, which is likely a milking shed or cow-yard, one and possibly two cisterns, several collapsed small buildings, a 'very impressive ford', and grubbing holes from whence stone was extracted. There was a dry stone wall parallel to the creek. Other dry stone walls are now easily visible on satellite views: the east-west boundary wall, and the asymmetrical stone enclosures.[298]

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[295] Peel, *op cit*, eg pp.96, 106, 109, 115
[296] *Melbourne Times*, 25th June 1842
[297] Hall, 1989, *op cit*, 'Volume 2 Recommendations', pp. 4, 8-10
[298] Hall, 1989, *op cit*, pp.52-57

Without the benefit of historical context, or satellite imagery, the possibility that some of this complex might have been cultivation paddocks is not considered; Hall proposes that 'these walls would have directed movement of stock about the settlement'. Confirming however that asymmetrical paddocks are foreign and unusual, he notes they 'look peculiar to the eye familiar with the symmetry of modern farming.'

Hall notes separately the asymmetrical enclosure on the south side of O'Herns Road as site WS3. This enclosure is of additional interest for having a ditch, some 150 metres long, along the northern part of the wall; he identifies this as a variant of early stone walls. He identifies another small enclosure almost opposite, on the west side of Merri Creek, and nearby grubbing holes from which stone for the walls would likely have been prised.[299]

Hall's description of the walls and foundations of the stone dwellings identifies 'floaters', uncoursed walls, and roughly squared quoins. The homestead however includes dressed basalt blocks all the way around its basal layers. Two 'hand-made sun-dried bricks' were also found.

The complex he describes in his preliminary survey would appear to date to the mid to late nineteenth century. The dairy remains appears to be sizeable, likely dating to the 1850s or perhaps the dairy boom of the 1860s. The complex appears to have accrued many different small buildings, sheep-yards, and farm refinements over a period.

All this fits the historical evidence of the use of the site for a family dairy farm from at least 1863 to c.1873, and sheep grazing, probably by a hired shepherd, from c.1873 to 1882. But this is not to say that some fabric does not date to the 1840s. The cultivation paddocks, noted in the 1849 advertisement for example, are likely to have been among the improvements (a primitive dwelling would be another, and probably a basic ford) that would have attracted a later tenant farming family to settle here and develop the complex.

Hall refers to Mr Taggert, an elderly Whittlesea man who thought that this was the site 'to the north of O'Herns Road on the Whittlesea side' of the Merri Creek, where his grandmother lived as a three year old. That report would confirm that the site was occupied somewhere c.1840s-70s. She may have been a member of Charles Ziebell's family.

Mr Taggert was also one of a number of locals who mentioned to Hall 'some other basalt ruins' further inland and closer to O'Hern's track'.[300] While nineteenth century archaeological artefacts have been found of the former 'Edgars Farm', on the east side of Vearings Road,[301] this land was not alienated until 1853. It is also distant from O'Herns Road. *Hendon Park Farm*, on the corner of O'Hern's and Vearings Road, has neatly constructed, roughly squared internal cultivation paddock walls, which are similar in that regard to later examples in Whittlesea, but there is no evidence of an early farm complex.[302] The only other such site in this locality, which matches the location exactly, is the farm complex on *Maryfield / Clonard*, which similarly includes the ruins of a building, adjacent to stock yards and cultivation paddocks.

That both of the sites were apparently regarded by locals as distinct and notable is telling, confirming their exceptional nature in terms of early accommodation and stock yards adjacent to enclosed paddocks. It also suggests the sites were regarded as being of a similar vintage, which pre-dated other early farming complexes of the area. The fact that we now know that they shared an historical link to the Argyle Estate, and that both are likely to have had cultivation paddocks by 1849, confirms the impressions of the locals in 1989.

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[299] *ibid*, p.52. Ditches associated with dry stone walls are described in UK literature, and also identified as a type in the Victorian Fences Act 1874. No heritage survey of dry stone walls has been undertaken in Victoria, but none are known, and no other examples have been identified in the Melbourne region, in the municipalities of Whittlesea, Hume, Melton, or Wyndham.

[300] Hall, 1989, *op cit*, p.56

[301] 'Edgars 1 Farm Complex', 210 Vearings Road, VHI H7822-0238

[302] 'Hendon Park Farm', 15 Vearings Road, delisted VHI D7822-0821

The first lots of land referred to in the 1849 Campbell sale advertisement comprised only 2487 acres of the original 5853 Argyle Estate. The first allotments mentioned were the four Merri Creek farms on CA7, and then the former 480 acre property on CA5 (*Maryfield*) then nine smaller properties on the Darebin Creek. It is most likely that 'fenced' enclosures for 'cultivation' that were highlighted in the 1849 advertisement were on the first named of the advertised properties, ie those on Section 7 and Section 5.

More exact examination would confirm whether, as appears from satellite images, at least three of the four enclosed paddocks on CA7 correspond to the 1840 Argyle property boundaries. It is also possible that some or all of the enclosures date to the later period of tenant farming, or else that they were constructed progressively, over decades. Archaeological investigation of the construction of the walls might shed light on these questions.

The rectangular boundaries of Thomas and Mary Alston's *Maryfield* property on O'Herns Road – once almost completely walled (except for the lower flat on the south boundary, where it crossed a drainage line) – relate directly to Campbell's 1840 'Argyle' subdivision. This is the only known remains of a farm boundary from the early years of Port Phillip, and one of only two others known in Victoria.[303] Significant remnants of the wall on its east, south and north (O'Hern's Road) sides appear to remain; the north and east boundaries are also the boundaries of the Campbellfield Estate. The western boundary was removed as a result of quarrying works. Although the northern boundary wall was shifted 22 metres south to align with O'Herns Road in 1858 or some time thereafter, this is also part of the history of the site, and is not significant in terms of the integrity of the original 480 acre property regarding either its size or shape.

The internal *Maryfield* complex of cultivation and stockyard walls date to the nineteenth century. The Bunting (and Love) family understood the purpose of the walls as having been part of a cultivation paddock, that had separated cultivable from stony land, and protected crops from stock; they may have continued to use it for growing their maize and other feed for their dairy cattle and horses early in their occupation; they later established a new cultivation paddock, with modern fencing, nearby. It is likely, in view of the 1849 advertisement stating that 'portions' of these properties had cultivation fences, that at least some of these walls were built by Alston and his workers in 1841-1844, or perhaps (less likely, in my view) later in the 1840s by a subsequent tenant farmer. It is unlikely that they date to the large dairyman Baker; for example aerial photographs show that competitor dairyman Morgan's cultivation paddocks were located near to his dairy.

The Victorian Heritage Database states that there is 'no evidence' of the Alston association, and that the *Maryfield* walls were probably built in the Winter period, although they could be from the Alston period, built to keep stock off crops.[304] Further evidence, in the form of the 1849 advertisement, has now been found. In any case evidence regarding such an early period of European settlement is usually only circumstantial. At present the evidence that they were built by the Winters appears only to be that they occupied the site for 22 years, whereas the Alstons occupied it for only 3-4 years. Both occupants are very likely to have built cultivation paddocks, Alston for grain, and the Winters for stock feed. But the other circumstantial evidence points to the internal walls having been built by the Alstons; it is probable that both the Alstons and the Winters built internal walls.

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[303] Moloney, 'Clonard', 2009, *loc.cit*
[304] Victorian Heritage Database Report, 'Clonard – Sheep yards remnant dry stone walls'.

With every expectation of owning the land (unlike Winter) and with children born on the property, and commitments to his local church, it was clear Alston was settled and very serious about developing his property. We also know that Alston had three men living on the property in 1841 and, it is presumed (as was typical of the properties recorded in that census) that they were his employees; it would have been a simple matter for them to build good internal stone walls for cultivation paddocks during his occupation.

That the only improvements that the 1849 advertisement considered worth mentioning (although there was an almost new dwelling on *Maryfield*) was 'fenced cultivation' paddocks, demonstrates how high a priority fencing was for farmers in that period; fences were one of the very first improvements made to farms. The *Maryfield* cultivation paddock, unlike the fully enclosed examples on the Merri Creek, was the same as those 'cultivation' paddock walls shown in the early 1840s maps at Keelbundora just 3-4 kilometres away: bow-shaped and only partially walled.

If the *Maryfield* internal walls were 'remnant' 'sheep yards' as stated by the Victorian Heritage Database they do not appear to have been built by the Winters, whose clearing sale shows that they operated a dairy farm, as did nearly every other late nineteenth century small farmer in the Epping area.

These are rare and of course potentially very significant early Port Phillip farming sites, and unresolved questions should be addressed by more rigorous historical research than is possible here, and by archaeological investigation. For the purposes of this study there is enough evidence to confidently state that both the CA5 and CA7 sites include cultivation paddocks as well as stock paddocks and yards, and that some of these walled enclosures are possibly of a very early date. As cultivation paddocks were key farming infrastructure, especially in the pre-early 1860s period where cereal crops provided the primary income for small farms in Port Phillip, the history and fabric of these stone walls needs to be more fully examined, together with the associated dwellings and stock yards.

Although the ground in the part of CA7 near the Merri Creek appears to lack pronounced 'stony rises', the irregular shape of some of the paddocks on the Merri Creek appear to have been similarly determined by boundaries between stony outcrops and arable ground. Here however the paddocks were entirely enclosed by dry stone walls. The cultivation paddocks in this proposed precinct had associated dwellings; two of the 'cultivation' enclosures in Keelbundora also had an associated 'hut'.

Hall concluded that the Merri Creek site 'has obvious research possibilities' and that 'archaeological and historical study of WS4 may lead to uncharted areas of social and economic history along the lines of Young's (1985) study of German settlements in South Australia'.[305] It is, he says:

> '… a unique site in the context of the locality and the region, and probably one of relatively few such sites in the state. It consists of the remains of a complete mid to late-nineteenth century farming complex built of stone.'[306]

[305] Hall, 1989, *op cit*, pp.3, 59
[306] *ibid*, p.91

When he wrote this Hall was unaware that the farming history of the site dates to 1840, and that by 1849 it probably had cultivation fences, almost certainly at least partly stone walling.

Existing historical information suggests that it is possible that the dry stone walls and associated structures in this area were built over successive European occupancies from the 1840s. This potential for very high heritage significance necessitates further research into the history of the precinct.[307]

It is recommended that what we already know about the sites justifies archaeological investigation, which might: help establish the date of the complexes; provide information about the former dwellings and their residents; and provide unique information about the first farming in Victoria, and in particular farming in the uncommon stony rises volcanic landscape of the City of Whittlesea in the nineteenth and early twentieth century.


***Image 70:*** *Three of the four stone wall enclosures on Merri Creek, situated on Crown Allotment 7 in the parish of Wollert, subdivided by Charles Campbell in 1840 as the Argyle Estate. Closer satellite views, and field-work inspection of the centrally located paddock shows enclosed land in several of the paddocks to be distinct in vegetation from the surrounding land, some of which is stony outcrop; this was possibly a cultivation enclosure. The southernmost enclosure, bisected by a small tributary, suggests a stock yard. Across the top an east-west fence marks the northern boundary of the Campbellfield Estate. (Multimap, July 2019)*

[307] Options for further research would include: interviews with the Vearing family or other locals regarding their neighbouring property; more detailed research of Council ratebooks; further research of Trove newspapers (eg regarding names of lessees, places, nearby news events etc); research of further historical aerial photography; consultation with the Whittlesea historical society; research of the history of other known 1840 purchasers of Merri Creek sites, Hector McCrae and Robert Stewart; research of Whittlesea resident Mr Taggart's family history.

*Image 71: The enclosure near the farm complex appears to sequester a patch of arable ground, or perhaps a clean stock paddock, among stony outcrops in the satellite view. (Google satellite, July 2019)*

*Image 72: The remains of the dry stone wall of the central Merri Creek enclosure on CA7. Parts of the same wall can be seen in the distance. (David Moloney, 2014)*

*Image 73: A fifth Merri Creek partly-walled enclosure south of O'Herns Road, on Crown Allotment 5. The north and west walls separate stony rises from arable land. Hall identified a 150 metre long ditch inside the northern wall, most of which remains. (Multimap, July 2019)*

*Image 74: The well-preserved portion of the O'Herns Road wall on the former Maryfield property, which has just been removed, was part of the northern alignment of the 1840 Maryfield property boundary. A nearby small quarry or grub hole on top of the stony rise was the likely origin of stone for the wall. This part of the wall was reconstructed c.1858; a considerably less intact portion west of the Hume Freeway survives. Satellite views suggest that most of the eastern boundary wall of Maryfield survive; this also preserves part of the 1838 Crown Allotment and the Campbell estate boundary; it conceivably retains fabric from the 1840 subdivision. (David Moloney, 2000)*

*Image 75: Satellite view of 275 O'Herns Road, the former Maryfield farm. (Multimap, 2019)*

*Image 76: Aerial view of the same property in 1947 shows the top wall to be the irregular south-east portion of a cultivation paddock, partitioning off a stony outcrop. The former owner advised that the long curving wall beneath it was the walled section of an early semi-enclosed cultivation paddock; it sloped towards a gully, where its fencing would have been of a lighter material. (Aerial Survey of Victoria, 1946-47)*

*Image 77: Another view of the same complex looking east (prior to the freeway being built). The enclosures in the foreground may have been stock yards, but the wall in the distance is part of a cultivation paddock whose eastern edge, on softer ground near a former stream, was a post & wire fence in the twentieth century. There are the remains of a former dwelling in this complex. (David Moloney, 2000)*

*Image 78: A rare surviving 'Horse Drawn Stone-Carrying Sled', 275 O'Herns Road, Epping (Victorian Heritage Database). Fixings for timber boards across the forks are evident on closer inspection. It was very primitive compared to those built by Westgarthtown pioneers, who rivetted galvanised iron sheets across parallel red gum runners.[308] (David Moloney, 2009) (https://vhd.heritagecouncil.vic.gov.au/places/121090)*

[308] Borrack, 1988, *op cit*, p.11

## B. 'LARGE DAIRIES'

### History

*Farming on the 'Campbellfield Estate' in the late nineteenth century*

Historically, Wollert was predominantly a district of small dairy farms.[309] Popularly, absentee landlords were not regarded as good for a district. A *Leader* journalist in 1876 did not need to mention names when reporting on improvements to country near Epping he referred to the 'colonial landlords with short-sighted policy'.[310]

In the nineteenth century, before improvements in transport, irrigations schemes and other technological developments saw south-east Gippsland, parts of the Western District and the Murray region become Victoria's leading dairy areas. Dairying was 'largely confined to areas surrounding Melbourne and scattered throughout Central Victoria, where a ready market existed for dairy produce.'[311] The industry was dominated by small family farms producing butter, cheese, and where there was a nearby market, fresh milk. Generally the small farms nearer to Melbourne, including those at Wollert, provided whole milk to the growing urban market.[312]

By (at least) 1858 Friedrich and Maria Winter, who owned land at Westgarthtown, were leasing from Charles Campbell the 480 acre former *Maryfield* property. They later extended this area to 570 acres, which included land on the Merri Creek to their west.

Frederick Winter died and his sons took over the property. On 2nd March 1880 a clearing sale was held of the entire 'Messrs Winter Brothers' farm. The inventory of stock and farming equipment provides a clear picture of the type of farming that was being undertaken by the Winters, and likely most small farmers who leased the Campbell estate. It comprised, firstly, the 'whole of their dairy stock', which included '30 prime cows now in milk; 20 springers and dry cows; 2 bulls, two and four years old; and 10 good heifers'. There were four draught horses, and '14 grand bacon pigs'. The farm implements included a 'Lennon's mower, Robinson's hay rake', a corncrusher, chaffcatter and horseworks 'by Buncle', 'Lennon's ploughs, harrows, hay and tip drays, and spring-cart harnesses, and an assortment of other items to complete the list, 'everything of the best quality'.[313]

Although well within the fresh milk area, the herd of pigs suggests that butter making, rather than fresh milk, was the focus of the Winters' operation. The chaffcutters and corncrusher indicate that hay and maize feed-crops were prominent crops being grown in their cultivation paddocks.[314]

The Winters brothers and the Ziebell brothers were not the only German settlers to have leased the extensive tracts of the Charles and Robert Campbell junior estates. From 1858 Christian Ziebell, the leader of Westgarthtown's Mecklenburg Germans, and the largest landowner there, leased the 770 acre CA24 Parish of Keelbundora from Robert Campbell junior. This property stretched west from his Westgarthtown farm to the Merri Creek. Ratebooks show that by 1873 he had been joined by his son August in the lease. Christian Ziebell died in 1882, after which August appears to have relinquished the Campbell lease.[315] It was taken over by JS Morgan.

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[309] Payne, *Centenary History of the Wollert State School No.1861, 1877-1977*, Lowden, Kilmore, 1977
[310] *The Leader*, '29/4/1876, 'Epping Park Shorthorns'
[311] Dougall, Diane, 'Dairying', in Richard Aitken (ed), 'Farm Buildings in Victoria to 1938' (Monash Public History Group & La Trobe University College of Northern Victoria' (1992), p.82.
[312] Dingle, T, *The Victorians: Settling*, Fairfax Syme Weldon, McMahons Point, 1984, pp.114-115
[313] *The Australasian*, 21st February 1880.
[314] This is very similar to its use when it reverted to a family dairy farm in the early – mid twentieth century.
[315] Wuchatasch, 1985, *op cit*, pp.37-8; PROV, VPRS 14601/P1/3, Shire of Epping Ratebooks, 1863 - 1871; Shire of Darebein Ratebooks, 1873 - 1887.

Yet another Westgarthtown family leased large Campbell properties. By the time of the oldest surviving ratebook (1863) John Maltzahn is rated as the occupier of Robert Campbell's CA23, the 740 acre allotment to the south of Ziebell's lease. The 1873 ratebook describes him as 'dairyman'. In the 1870s he was joined by Louis Maltzahn. Ratebooks show that they were in continuous occupation.[316] In 1893 the 'Maltzahn brothers' were issued another three year lease by the family of Robert Campbell.[317]

In 1880 an advertisement appeared to let 'a first class grazing farm of 570 acres, having frontage to Merri Creek, at present occupied by Messrs Winter Bros'.[318] The new tenant was Thomas Harrison Baker, 'Dairyman of Darebin Creek'.[319] Baker was already a colossal dairy farmer, holding numerous leases of Campbell properties.

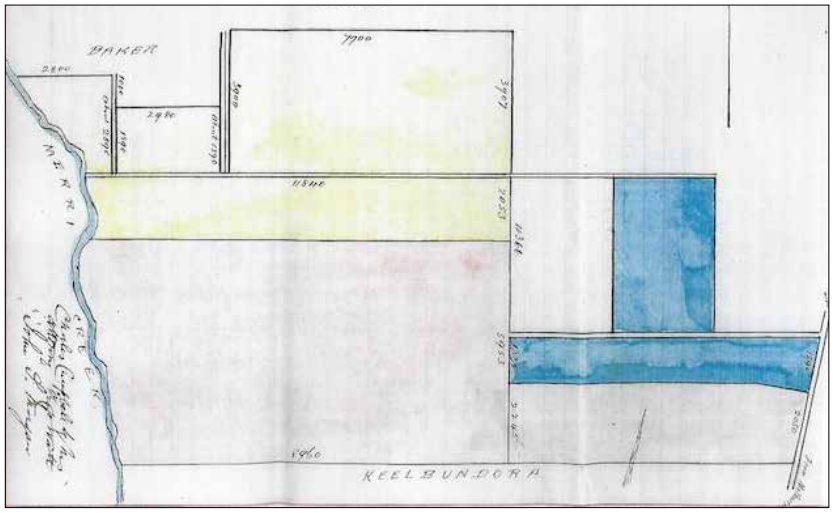


*Image 79: A part of one of the Campbell–Morgan leases, showing properties held by previous lessees. The Baker (yellow) and Morgan (pink) leases abut. Some of the top allotments were previously leased to the Winter family. (PROV VPRS 460/P2723, TA 26860)*

The escalating demand for fresh milk by Melbourne in the 1860s and 70s not only inspired the growth of small dairy farms in the Thomastown–Epping–Wollert area, but also, thanks to the Campbell estate, a conglomeration of major dairy farms, a number of which were the largest in nineteenth century Victoria.

The movement of John Kerr, and John Steven Morgan, from smaller farms in the northern suburbs of Melbourne to take advantage of the larger properties available in the Campbellfield–Thomastown area is instructive. Kerr had moved from dairying at Alphington to establish the 'well-known Glenroy dairy' at Campbellfield.[320] Property indentures confirm that John Kerr's property, which continued to be known in Campbellfield as the Argyle Estate, was 788 acres leased from Charles Campbell.[321] In 1879 his son John Kerr junior started the Glenallen dairy (now Camp Road Broadmeadows), which in the mid 1880s was milking 400 cows.[322]

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[316] PROV, VPRS 14601/P1/3, Shire of Epping Ratebooks, 1863 - 1871; Shire of Darebein Ratebooks, 1873 – 1887
[317] PROV VPRS 460/P/2723; PROV VPRS 460/P/2921
[318] *The Australasian*, 21st February 1880.
[319] PROV VPRS 460/P/2723, Torrens Application No.28680: Lease, Charles Campbell to Thomas Harrison Baker, 1/5/1880
[320] Sutherland, A, *Victoria and Its Metropolis: Past and Present*, Vol. IIA, McCarron, Bird, Melbourne, 1888, p.428. Glenroy House, built by Kerr, still stands as part of Penola College, Broadmeadows.
[321] PROV VPRS 460/P/2723, Torrens Application No.28680: Lease, Charles Campbell to TH Baker, 18th March 1887.
[322] Sutherland, *op cit*, p.428

In 1863 Stephen Morgan was milking 100-150 cows at Preston, and in 1873 he moved to Thomastown, where he rented 2500 acres on which by the mid 1880s he milked 320 cows.[323] Milk from his dairy was carted directly to the several dairies which his family owned in the northern suburbs.[324] Again, it was the availability of Charles Campbell's land that enabled Morgan to establish his dairy on such a large scale.[325]

In the busy season Morgan employed 40 men, and a 6 horsepower steam engine to cut chaff and crush corn. Although described by Payne as 'an educated bachelor, almost a recluse', he served as a Councillor of the Darebin Shire for some time, was President for a year, and a local JP.[326] In the mid-1880s Morgan's farm was described as 'one of the largest dairy farms in the colony'.[327]

On the northern and western parts of the same Campbellfield Estate, including the former *Maryfield*-Winter farm, was dairyman Thomas Harrison Baker. Baker had arrived in Melbourne from his native Somersetshire in 1854. His movements before settling at Campbellfield in 1866 are unknown, but in the mid-1880s he was said to be operating 'the largest dairy farm in the colony' on Campbell's land, upon which he kept 'about 600 cows.'[328]

Two leases between Campbell and Baker, 'of Darebin Creek … Dairyman', survive. The first, in 1880, is for 1708 acres, to be leased for six years and ten months at £854 per annum. It shows that Baker had previously tenanted a smaller portion of the Campbellfield Estate. The second lease, of 1887, shows Baker increasing his presence on the estate, this time leasing 3571 acres for five years at £1700 per annum.[329]

Campbell's leases to Morgan and Baker include plans that show smaller earlier farms, with some of the names of the previous tenants. Baker's 1880 lease, for example, amalgamated portions of land 'lately in the occupation of …'Frederick, John, and Charles August Winter (570 acres), Donald Geddes (258 acres), Hay Lonie (211 acres), and John Dow (69 acres). The following lease (1887) incorporated land previously let to Charles Ziebell, and John Kerr. Morgan's 1881 lease showed that he had taken over tenancies previously held by Thomas Goodman, Richard Goodman, and Hay Lonie.[330]

The location of Campbellfield–Thomastown at the northern edge of Melbourne, and the broad acres available for rent on the Campbellfield Estate, were key to its supply of fresh milk to the burgeoning city of Melbourne in the late nineteenth century. The nature of tenant farming on the Campbellfield Estate changed in response to this new demand, with the original smaller farms, including the *Maryfield*-Winter property, being progressively amalgamated into the two massive commercial dairy farms of TH Baker and JS Morgan.

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[323] Sutherland, *op cit*, p.432
[324] Payne, Whittlesea, 1975, *op cit*, p.75.
[325] PROV VPRS 460/P/2723, Torrens Application No.28680. Leases of 1881 and 1887 Campbell to Morgan. These leases are for 830 acres, but the accompanying map of lands leased shows approximately twice that area.
[326] Sutherland, *op cit*, p.432; Payne, Whittlesea, 1975, *op cit*, p.75.
[327] Sutherland, *op cit*, p.432
[328] Sutherland, A, *Victoria and Its Metropolis: Past and Present*, McCarron, Bird, Melbourne, 1888, p.420
[329] PROV VPRS 460/P/2723, Torrens Application No.28680. Leases Campbell to Baker, 1/5/1880, 18/3/1887.
[330] PROV VPRS 460/P/2723, Torrens Application No.28680.

In 1887 there was an extended newspaper report on the operation of 'Sambourne Farm', leased by JS Morgan, situated on Epping Road near present day Lalor. He had some 550 cows at this stage. The article describes its setting, and also its fencing:

> 'Long before arriving at the gate, the house and extensive outbuildings are in view and show that a work of importance is carried out here. The site is a pretty one, occupying as it does the crown of a low and prettily rounded rise, the land from which slopes gently down to the main road. The soil of a good deal of the surrounding country is rich and black, being composed of disintegrated basalt and is very productive in anything like a favourable season, though somewhat difficult to work. Numerous low rises, giving it an undulating appearance, stud the country hereabouts, on the majority of which the basalt rock crops out on the surface. The grass which grows amongst these rocks is very sweet and rich in nutritive properties.
>
> The farm consists in all of 3000 acres, the main road running through the properties. On the homestead side are 1800 acres which run back to the Merri Creek … In addition, 1500 acres are held at Woodstock, about 9 miles away, on which dry cows are depastured.
>
> Sambourne Farm has been subdivided into seven paddocks, the fencing being stone wall, post and rail and wire. Stones are plentiful in the district and walls are common, the cost of erecting a wall 4 feet in height being about 23 shillings per chain if the stones have not be carted any great distance. A man used to the work will build about 1 chain a day.'[331]

That fences were primarily stone walls, and that stone walls were still being constructed at a significant scale in 1887, likely signifies the plentiful supply of local stone. It is also of interest that they were being built only 4 feet high (as specified in the 1874 Fences Act), whereas in the west of Victoria the usual height for a sheep wall was held to be 4'3'', and the height of walls for cattle was commonly said (or perhaps presumed by historians), to be have been higher than for sheep. One explanation might be the comparative docility of dairy cattle.[332]

Other points of interest were the two very large milking sheds, the refrigeration from water cooled in two 50,000 gallon underground tanks, and the making of cheese with surplus springtime milk. The cultivation on the property consisted of 70 acres of wheaten hay and 10 acres of mangels.

Baker and Morgan lived at opposite sides of the estate. Baker had moved from Darebin Creek to near the Merri Creek at Merrilands south of Mahoneys Road, while Morgan was at *Sambourne Farm* Thomastown. Their shared lease boundaries apparently provided opportunities for conflict. The first entry of the Epping Pound book (1892) records that '15 horses belonging to Mr Morgan were impounded by T Baker and were released by Patrick Mahony'.[333]

In 1902 a branch of the Victorian Wholesale Milk Distributors Association was formed at Epping. The Chairman was Cr. JS Morgan JP, of Thomastown.[334]

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[331] *The Leader*, 12th November 1887, p.11
[332] Robert Wuchatsch, email correspondence, 29th May 2019
[333] Payne, Whittlesea, 1975, *op cit*, p.99
[334] Wuchatsch, *op cit*, p.88

On Robert Campbell junior's land immediately to the south, Christian Ziebell, the largest landowner at Westgarthtown and the leader of the Mecklenburg Germans there, from 1858 had leased the 770 acre CA24, Parish of Keelbundora. This property stretched west from his Westgarthtown farm to the Merri Creek. Ratebooks show that by 1873 he had been joined by his son August in the lease. Christian Ziebell died in 1882, after which August appears to have relinquished the Campbell lease.[335]

Yet another German family leased Robert Campbell's CA23, to the south of Christian Ziebell's lease. By the time of the oldest surviving ratebook (1863) John Maltzahn is rated as the occupier of this 740 acre allotment. The 1873 ratebook describes him as 'dairyman'.[336] In about 1874 he was joined by Louis Maltzahn in the lease. In 1887 John and Louis are described as 'the Maltzahn brothers'.

*Farming on the Campbellfield Estate in the early twentieth century*

As discussed in the historical overview, two changes in the late nineteenth and early twentieth century constituted a watershed in Australian rural history. Firstly technological breakthroughs (refrigeration, the Babcock tester, and centrifugal separator) combined with artificial fertilisers and new pastures to transform dairying from a farm craft to a rural industry.[337] Secondly the big pastoral estates were broken up into thousands of small farms, encouraged by heavy new land taxes, and closer and soldier settlement legislation. Dairying boomed, and co-operative creameries and butter factories sprang up across the state.[338]

These factors appear to have contributed to the decision of Charles Campbell's son Frederick to subdivide and sell the estate in 1912. The Hon Charles Campbell MLC (NSW), son of the original purchaser, had died in 1888 and in 1891 his executors lodged an application to create a title for the whole Estate. The only other interests in the land at the time were the continuing leases to dairymen Baker and Morgan. Surveyor Joseph Tarrant's 1891 map shows parts of the boundary walls.[339]

[335] Wuchatasch, 1985, *op cit*, pp.37-8; PROV, VPRS 14601/P1/3, Shire of Epping Ratebooks, 1863 - 1871; Shire of Darebein Ratebooks, 1873 - 1887.
[336] PROV, VPRS 14601/P1/3, Shire of Epping Ratebooks, 1863 - 1871; Shire of Darebin Ratebooks, 1873 - 1887.
[337] Brinsmead, G, '1888 – Turning Point in the Victorian Dairy Industry', *Australia 1988*, No. 5, pp.67-79
[338] In a few years the creameries were replaced as dairy hygiene was improved by the centrifugal separator, and cream was transported straight from farms to butter factories. Dingle, *op cit*, pp.116-119; Priestly, S, *The Victorians: Making Their Mark*, (Fairfax Syme Watkins, Sydney, 1984), p.205.
[339] Lands Victoria, Survey Plan 28680; PROV VPRS 460/P/2723, Torrens Application No.28680


***Image 80:*** *The former JS Morgan 'Sambourne Farm', Lalor (1946-47 aerial photo). Showing house on stony knoll with milking sheds behind. In front, around stony rises, there appears to be a crop in harvest. Behind, in amongst further stony ground, are typical Merri-Darebin Creek cultivation paddocks for maize, mangels etc. As Robert Wuchatsch remembers, this Epping Road area was the main area of dry stone walls in the Campbellfield Estate. Above the farm buildings can be seen an east-west boundary stone wall which extends far westward; this is the wall between the blue and the pink leases shown in Image 79. It met a north-south boundary wall, part of which appears to survive east of the present Epping Wholesale Fruit & Vegetable Market (325D Cooper Street, Epping). These long straight boundary stone walls were characteristic of the Campbellfield Estate. High Street (Epping Road) is at right. The house is in the approximate location of today's Kiama Drive.*

Prominent early Flemington Saleyards identity Harry Peck tells that the Campbellfield Estate had been tied up to a 'tenant for life', and when Charles died it was valued for probate by the Government 'on boom values at about five times its productive worth, and to meet the extortionate probate the property had to be heavily mortgaged, as by the will it could not be sold.'[340] In a later letter Charles' son Frederick noted that the valuation on the Campbellfield lands was £260,000, 'tho' we could not get £50,000 for them.'[341] In 1899 Frederick Campbell, having been informed of the 'New Land Act' which sought owners of land 'suitable for Dairying or Agriculture' wrote to the Minister for Lands offering him the whole or part of the family's 5,294 acres in the Parish of Wollert; this offer was apparently not accepted.[342] Later the beneficiaries divided the property into four, hoping to sell the 'homestead' allotment with 422 acres to repay the mortgage. Parts were transferred to Charles' children, Frederick of *Yarralumla*, and Sophie Byron, of Scotland and England. Some portions of the estate remained in the hands of descendants until 1940.

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[340] Peck, *op cit*, p.93
[341] Letter, Frederick Campbell to Commissioner for Land Tax, Melbourne, 6th November 1912, in transcriptions of F Campbell's letters provided by Mr RSC Newman to Mr Tom Love.
[342] Letter, Frederick Campbell to Minister for Lands, 27th April 1899, Newman to Love, *op cit*.

Broadmeadows historian Andrew Lemon notes of the Campbellfield Estate at its 1912 sale: the 'largest intact property … the old Argyle Estate, running eastward from the Sydney Road across the Merri Creek to within one mile of the townships of Thomastown and Epping ... was still in the hands of the Sydney descendants of the original owners, the Campbells.' Lessees, noted Lemon, had included prominent dairy operators John Kerr, Fred [sic] Morgan and Thomas Baker. The auctioneers at the sale claimed that Baker's portion 'for many years has been carried on as one of the chief dairy farms in the state'.[343] In 1929 descendants of Campbell in England still owned 630 acres of the former Campbellfield Estate, presumably allotments which had failed to sell in 1912.[344]

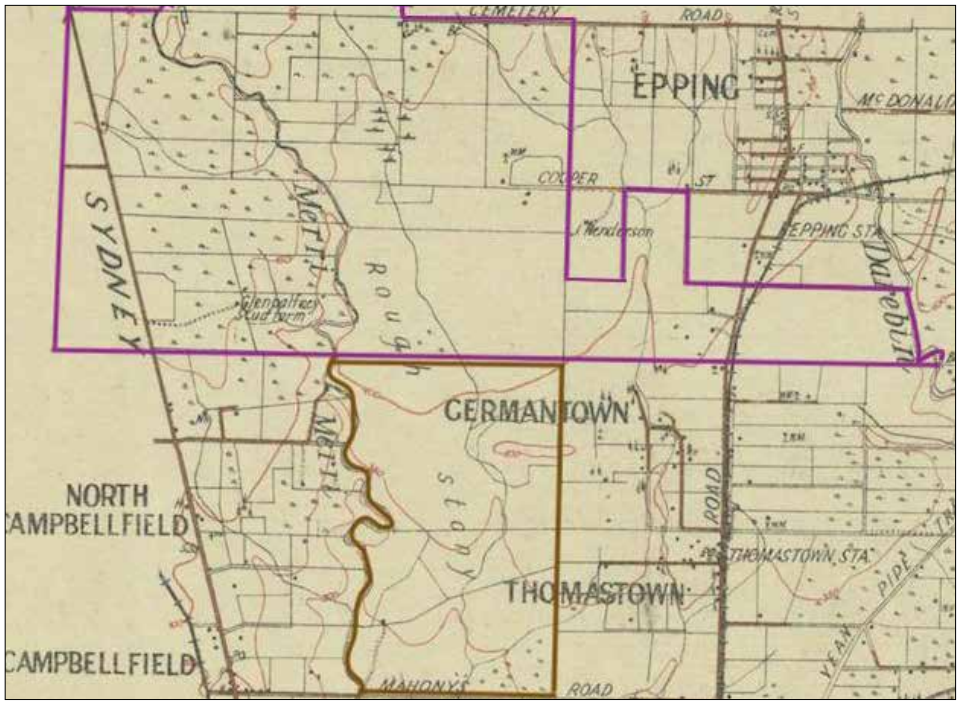


*Image 81: The eastern regions of the Merri Creek in 1916 (PROV Historical Plan M/DEF 121, 1916)*
*Mauve: the boundaries of the southern part of the Charles Campbell estate (sold from 1912), based on 1891 title application information. This estate continued northwards along the Merri Creek and Vearings Road to a line extending west from Harvest Home Road. Parts of the south eastern portion of the estate, to Darebin Creek, had been sold in the nineteenth century. (PROV VPRS 460/P/2723)*
*Brown: part of the estate of the family of Charles' brother Robert Junior as it was in the 1890s, between Westgarthtown and Thomastown in the east, and the Merri Creek in the west. (PROV VPRS 460/P/2921, and Shire of Darebin Ratebooks)*
*The lack of development in this area in 1916 is evident in the almost complete absence of property boundaries (and stone walls) east of Merri Creek. While there is more subdivision on the Campbellfield Estate west of the Merri Creek, much of this land was later also leased out to Baker and Morgan. The virtual absence of development was not due simply to the 'Rough Stony Pasture' land, but also to its dominance by the Charles Campbell and Robert Campbell Junior families, who had purchased their vast estates in 1840 and 1838 respectively.*

[343] Lemon, A, *Broadmeadows: A Forgotten History*, City of Broadmeadows, Hargreen, 1982, pp.108-109
[344] Certificate of Title Vol.4211 Fol.842085. The Campbell family still appears to have had interests in parts of this property into the late 1940s.

Traces of this story of the precinct in the twentieth century are picked up in John Borrack's reflections on and artistic depictions of the Thomastown landscape from the late 1930s. His vantage point was his great grandfather Christian Ziebell's farm at Westgarthtown. To the north and north-west was Charles Campbell's massive estate, where Christian Ziebell's sons Heinrich and Carl for decades leased the c.1100 acres of CA7 Parish of Wollert. To the west Christian Ziebell had for decades leased c.700 acres of CA24 Parish of Keelbundora. To the south-west the Maltzahn brothers for decades leased 740 acres of CA23 Parish of Keelbundora.[345]

Borrack's mid twentieth century portrayal of the 'long lonely Epping Road, bordered on the west by the thistle wastes of Callaghan's farm' is unlike the picture-postcard scene portrayed along Epping Road in 1887.[346]

The landscape between Epping Road and Merri Creek was described in 1926 by Leo Borrack, headmaster at Thomastown State School, as 'the badlands'. It is remembered by his son John as the 'Never Never Land' – windswept, stony, with wide horizons: a landscape of 'stark lonely beauty':

> a 'pulsating heat haze beneath which the golden grass, a tangle of thistles, briars, docks and the cracked volcanic soil sweltered. The basically flat topography was interspersed irregularly by low hillocks or mounds and basalt outcrops – volcanic residues – referred to as stony rises, mesas or buttes. These scarcely indented the straight horizon unless one sat low on the ground but their declivities, often unpredictably, formed morasses or small swamps.'[347]

Broken down stone walls could be a feature in a landscape of such low horizons. A First World War soldier Borrack met in later years recalled army exercises across the Thomastown district; his memories were of stone walls, and the welcome shade of Westgarthtown pines.

Robert Wuchatsch remembers that most of the walls north of Westgarthtown were nearer to High Street, and east of Edgars Creek.[348] Evidently many of these had been built by Morgan but a few had apparently been built by the early twentieth century generation of small farmers. Between Epping Road and the Merri Creek, among the few leaning she-oaks and wattles of the plains, Borrack recalled that 'sometimes one would alight upon the remnants of a shattered stone wall that marked the aspirations of a long departed settler.'[349]

To the north of Westgarthtown was a 'decrepit weatherboard farmhouse, the only sign of civilisation in that direction'. 'The house was partly enclosed by a raggle taggle fence …' His mother described that rock strewn area, almost impassable by a motor vehicle, as 'heartbreak corner'.[350]

Borrack understood these tenuous outposts to have been established on land sold just prior to the First World War 'for farmlets by the Campbell family of Sydney'.[351] These families 'battled the adverse conditions of the windswept plains to make a humble living by milking a few cows.'[352]

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[345] Ratebooks: Epping Roads Board, and Shire of Darebin; Torrens Application files: PROV VPRS 460/P/2723 and PROV VPRS 460/P/2921)
[346] Borrack, 1988, *op cit*, p.15
[347] Borrack, 1988, *op cit*, pp.15, 31
[348] Email correspondence, Rob Wuchatsch, 23 May 2019
[349] Borrack, 1988, *op cit*, p.20
[350] Borrack, 1988, pp.20-21
[351] Borrack, 1988, *op cit*, p.21
[352] *loc cit*

*Image 82: In the mid twentieth century a low dilapidated dry stone wall is an integral and conspicuous part of the wide and forlorn small-farming landscape. It is not known whether this last, 1912, endeavour by the Campbell estate, necessitated by new tax debts, to establish small farming was successful financially; it appears not to have been for the farmers. (John Borrack, 'House on the black soils plains, Thomastown')*

It is likely that the new farms, created in 1912, around the high-point of the dairy revolution, were small, and apparently of marginal viability. Further north, the Charles Campbell family's plan of subdivision had divided the original 480 acre *Maryfield* farm into four farms, most of which were soon consolidated.[353] The centre allotment, purchased by Alicia Horne in 1912, was sold to James Bunting in 1915, who in 1929 purchased two of the other blocks, essentially restoring *Maryfield* as a viable freehold family farm, 89 years after it had first been surveyed.[354]

The Will Will Rook (Fawkner North) section of the Robert Campbell Junior estate, on Sydney Road west of Merri Creek, was subdivided and sold in 1910.[355]

## Discussion

Satellite views, LiDAR mapping, and field-work reveal some surviving fragments of walls, including the very long straight boundary walls which are the characteristic type in this precinct.

This is historically and geographically a distinctive precinct within Whittlesea and within the wider Melbourne fringe area. There would appear to be no historically comparable dairy areas elsewhere on Melbourne's fringe in the nineteenth century. There were also large dairies in the eastern areas, but these were later, much further from Melbourne, apparently not as large, and in a totally different landscape.

[353] LP 5819 (26/6/1912)
[354] Certificate of Title Vol.3636 Fol.727034
[355] Lemon, *op cit*, p.109

Apart from milking sheds and a few dwellings, none of which appear to survive, there was probably very little else built in the Thomastown area as a result of this large dairy industry. The dry stone walls that were built in this precinct were perhaps its single largest nineteenth century development. The few that survive now are the more important for their rarity as the only material evidence of this important industry, and its genesis in the very early land policy of Port Phillip. They are the remnants of a significant story that has now been forgotten.

The long walls that were built on boundaries, either the external boundaries of the Campbell estate, or the boundaries of the different leaseholds within the estate, are the characteristic type of dry stone wall in this precinct. They are the categorical representation of the historical essence of this area: the use and management of land as an investment by a very large absentee landlord.

The Campbellfield Estate extended from Harvest Home Road in the north, to Kingsway Drive in Lalor in the south. Most of it was south of O'Herns Road, between Lalor and Campbellfield. Its western boundary in the north was the Merri Creek, but further south the boundary extended to beyond Sydney Road. Its eastern boundary had three steps: south from Harvest Home Road along Vearings Road, then east along O'Herns Road to a point opposite Cotters Road, then south to Cooper Street, east to High Street (less two properties on the south west corner) and south to the present Kingsway Drive. Its southern boundary is west from here to the Merri Creek (and beyond into the City of Hume).

Most of the northern boundary of the Charles Campbell estate is marked by a dry stone wall which is the western extension of Harvest Home Road. Its eastern boundary in this northern part is Vearings Road, which is also marked by a dry stone wall. Part of a wall along O'Herns Road constitutes another part of the boundary (the most intact part of this wall has very recently been removed). A dry stone wall in a southerly direction from O'Herns Road (the eastern boundary of *Maryfield*), was another boundary of the Campbellfield Estate. Some more intact sections of this south-bearing wall appear again east of the Epping Wholesale Fruit and Vegetable Market (at 325D Cooper Street, Epping). All traces of the former southern boundary wall of the Charles Campbell estate near Merri Concourse appear to have disappeared. Further north some 200 metres of dry stone wall mark part of the northern boundary of the Wollert Village Reserve and the Campbell Estate.

Further south, in the Merri Creek Parklands between the Hume Freeway and Merri Creek, on the former Robert Campbell Junior estate (south of the line of Kingsway Drive), leased for decades by Christian Ziebell prior to JS Morgan, and the Maltzahn brothers, a few remnant lengths of walls survive. Some of these appear to be stock holding yards, but another remnant in very poor condition follows the base of a stony rise, in the conventional Merri–Darebin Plains manner.

There were also few significant internal complexes of walls, incorporating stock yards and cultivation paddocks, in this area. Apart from those within the area of early farms associated with the Argyle Estate, and Morgan's *Sambourne Farm*, the other known complexes of walls are at the Vearing farm *Hendon Park*, which survive, and a large complex of walls on the site of the present Wholesale Fruit and Vegetable Market, which do not survive.

The two most intact boundary walls in terms of length are in the northern part of the Campbellfield Estate, on the east side of Vearings Road, and on the western extension of Harvest Home Road; their rural context also survives. The particular use of this land in the Baker dairy leas is not known. Presumably the key parts of the JS Morgan dairy estate were towards the south, where the milch cows would have grazed, feed crops were grown, and the milking sheds situated. The remnant walls on the north and east boundaries of the former *Maryfield* farm, the north-south wall east of the Wholesale Fruit and Vegetable Market, and the northern east-west boundary of the Wollert town reserve appear to be the only remaining evidence of Campbell's presence in the Epping-Thomastown area, and of Morgan's *Sambourne Park* dairy.

On the low plains and wide horizons of the area the occasional dry stone wall, often dilapidated by the mid twentieth century, was sometimes a feature of the landscape. These regularly appear in the foreground of John Borrack's pencil drawings of the Thomastown region.

Presumably many walls were built by the farmers themselves, but most would likely have been professionally built. We know, for example, that Morgan had a significant program of wall building. The 1891 survey of the Campbell estate confirms the sparsity of walls on the estate, but also that, characteristically, these walls were extremely long. They marked the boundaries of his estate, and presumably also leases within the estate. We know that Campbell's lease to Frederick Winter required the boundaries to be fenced either with stone wall or post & rail, the cost to be shared by lessee and lessor, so these boundary walls would also have been professionally built.

The 1887 newspaper article confirms that dry stone walls were in fact one of the prominent features of the large dairy landscape. By the mid twentieth century when observed by Borrack their use had passed, and they were bereft and unmaintained. Today their historical origins are even further obscured as a result of the loss of rural context. While they thus cannot be immediately or fully understood as a significant part of an historical landscape and dairy industry, the few isolated dry stone walls that do survive are in fact a meaningful and significant representation of an unusual and little known history. As they increasingly become an anomaly, they are potentially a greater point of interest in the new urban surroundings. A little interpretation would enable an appreciation of their unique historical significance.

***Images 83, 84:*** *One of the eastern boundaries of the Campbellfield Estate appears to be preserved in a north-south dry stone wall east of the Melbourne Wholesale Fruit & Vegetable Market (325D Cooper Street, Epping). Parts, probably over stony rises, appear from this satellite view to be in a good state of preservation. (Google satellite, July 2019)*

*Image 85: The western extension of Harvest Home Road, near its intersection with Vearings Road looking west towards Merri Creek. The wall is the northern boundary of CA7 Parish of Wollert, and the northern extent of the Campbell Estate. It was rented by dairy giant TH Baker. (David Moloney, 2019)*

*Image 86: Satellite views suggest that most of the wall along the western extension of Harvest Home Road, towards the Merri Creek are in poor condition. The exceptions are the section near Vearings Road, shown in Image 85, and this section further towards the Merri Creek, which seems to be a substantially intact across a stony rise. (Google satellite, July 2019)*

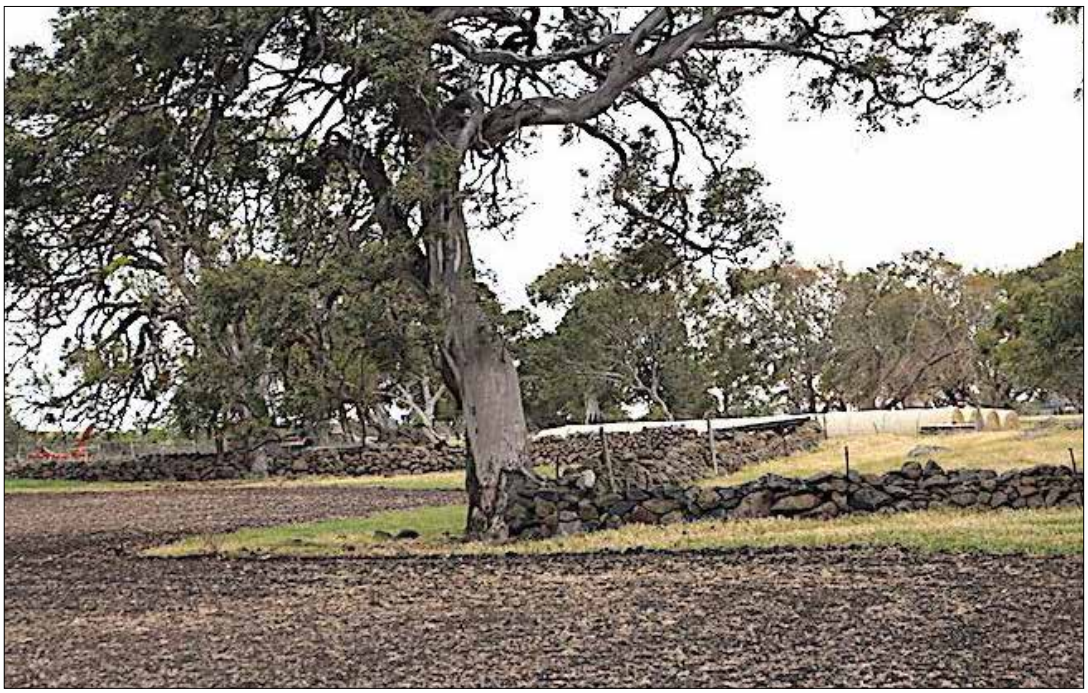

*Image 87: Cultivation paddock on CA7, west side of Vearings Road. A stony rise on the right is separated from the arable land by a regularised, stepped, dry stone wall, typical of the Merri–Darebin Plains. (David Moloney, 2019)*

*Image 88: Part of the Campbellfield Estate Boundary Wall, O'Herns Road Epping, at near full height as it passed over the stony rise. This wall has only just been demolished. (David Moloney, 2000)*

***Images 89, 90:*** *(Left) part of the northern boundary of the Campbell Estate along O'Herns Road. This composite stone and post & wire fence has now been demolished. A section west of the Hume Freeway survives. (David Moloney, 2000)*
*(Right) part of eastern boundary wall of the former Maryfield / Clonard farms, and of the Campbellfield Estate, prior to developments of the past years. Satellite views suggest that parts of this section of wall survive. (David Moloney, 2000)*

***Image 91:*** *Part of the Campbell Estate boundary wall, running north – south, located south of Cooper Street, east of the Epping Wholesale Fruit & Vegetable Market. This part appears to be in good condition, with copestones intact; it appears to be built on a stony rise. (David Moloney, 2019)*

*Image 92: The Merri Creek Parklands, or the 'Galada Tamboore' bowl, west of the Hume Freeway, looking south. Purchased in 1838 by Robert Campbell Junior, it remains effectively undeveloped. Stone building foundations in the area would be of tenants CA24 Parish Keelbundora, including Christian Ziebell, or the Maltahn brothers on CA23, which comprises the distant grasslands here. It was later rented by dairyman JS Morgan. This broken down wall is situated along the base of a stony rise and may have been part of a cultivation paddock. (David Moloney, 2019)*

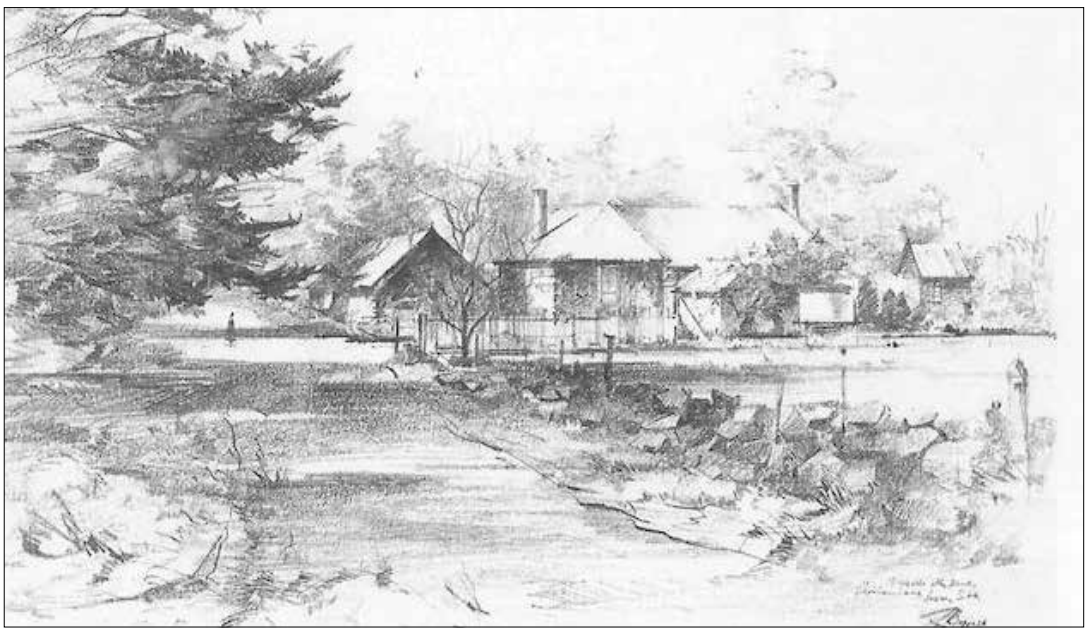

*Image 93: A landscape of stone walls and pines was remembered by a WW1 soldier training near Thomastown. (John Borrack, 'Ziebell's Farmhouse and Barn. View from Forge, north along German Lane.')*

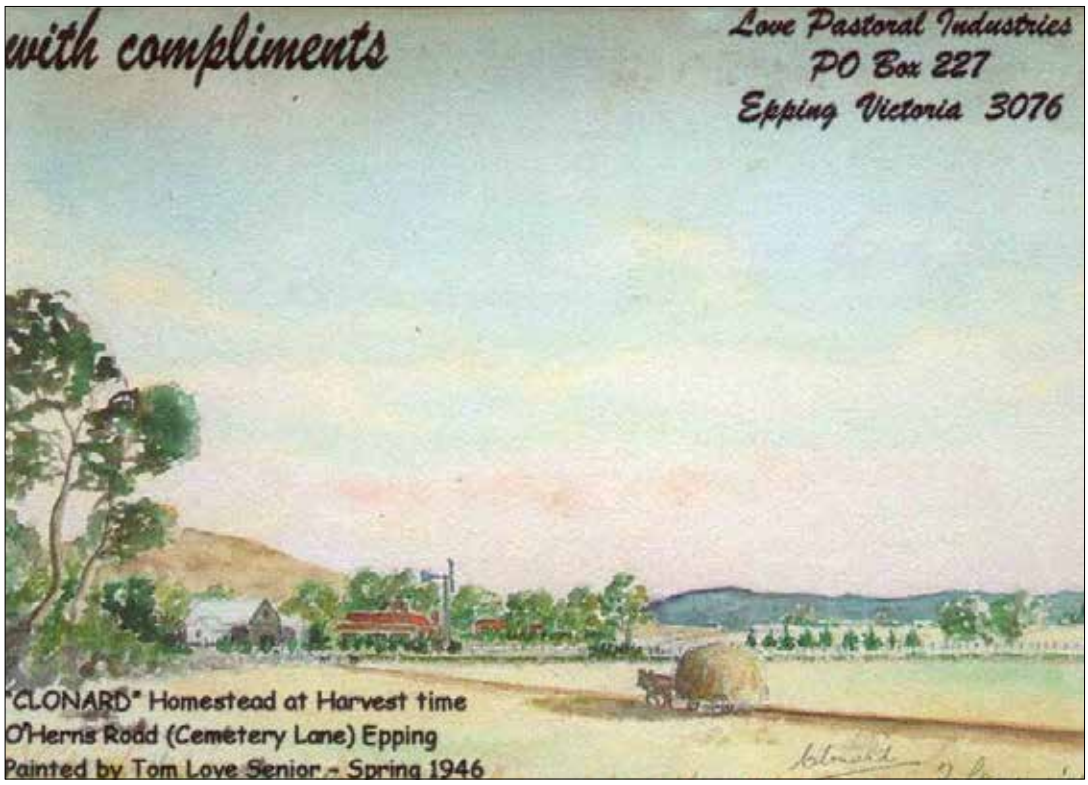


*Image 94: A 1946 rural scene of bringing in a harvest. On Clonard, the former Maryfield, on O'Herns Road, which consolidated three of Campbell's original 1912 allotments, it presents a very different picture to the small farms portrayed by Borrack west of Lalor. (Watercolour by Tom Love Senior, 1946)*

## Statement of Significance: 'The Campbell Precinct: Early Port Phillip Farms, and Major Commercial Dairies'

*What is Significant?*

The Campbell dry stone wall precinct comprises parts of Charles Campbell's and Robert Campbell's separate but abutting estates, acquired in 1840 and 1838 respectively. Charles' original aim was speculation, subdividing and selling farms as the 'Argyle' estate during the Port Phillip land boom, but this failed and like Robert he became an absentee Sydney landlord whose descendants rented out the properties until around 1912. Their long ownership of these vast tracts, still 6700 acres (2700 hectares), within the City of Whittlesea in the early twentieth century resulted in the scant development of this district, in particular the western Thomastown–Epping region. Originally the land was rented to family dairy farmers, predominantly from adjacent Westgarthtown, until by the late nineteenth century virtually all of the estate was leased to JS Morgan and TH Baker, who established two of Victoria's very largest dairies here.

The Campbell precinct thus has two components. Firstly, walls that were developed by small farmers within Charles Campbell's *Argyle* estate precinct during the nineteenth century, possibly from 1840; these walls are enclosed or semi-enclosed cultivation paddocks, organic in shape, or regularised by stepped perpendicular walls around the stony rises, and some stockyards. Secondly, the few surviving portions of long straight boundary walls, which epitomise the scant nature of development arising from absentee landlords' management of the land as a commercial commodity; these orthogonal fragments reflect the 1838 grid survey, and mark pieces of the Charles Campbell estate boundaries and some internal partitions, including a portion of the boundary of the Wollert township reserve, of which this wall appears to be the only extant evidence.

Most of the Campbell land has or is still being redeveloped for residential, quarrying or industrial purposes, negatively impacting the setting of many of the walls.

*How is it Significant?*

The Campbell dry stone walls precinct is historically and scientifically significant to the state of Victoria, and aesthetically significant to the City of Whittlesea.

*Why is it Significant?*

The dry stone walls in the Campbell dry stone walls precinct express the natural history of the area, and the cultural history of its human modification. They are particularly associated with the history, function, and materials of the distinctive stony rises landscape.

The Campbell dry stone wall precinct is ***historically*** significant to Victoria. (Criteria A, B) It is the product of the first Crown land sale, in 1838, of country land in Port Phillip, which established the land between the Merri Creek and Plenty River, and particularly the Merri Creek, as Melbourne's primary cereal cultivation district. An ephemeral Crown land policy of the 1830s favoured those with capital over aspiring farmers of small means, and the consequent monopoly ownership by the Campbell brothers shaped the development of this part of the City of Whittlesea.

The sparse, long walls that characterised the precinct are the categorical representation of its history: the use and management of a very large area of land as an investment by absentee landlords. The surviving sections of long straight walls contrast dramatically with the intensely developed, organic plans of dry stone walls on the small farms that were sold by the Crown in 1853, after the gold rush, in nearby Epping, Wollert and Woodstock.

The 1840-1843 *Maryfield* farm, with dry stone walls preserving fragments of its original boundary, internal remnant cultivation paddock walls that might date from the 1840s, and archaeological remains of later fabric and dry stone walls, is one of the earliest agricultural sites in Victoria. The farming site on Merri Creek near O'Herns Road retains north and south dry stone wall boundaries, and internal walls and archaeological remains, some which might date to the early 1840s. Large areas of the land were rented to local dairy farmers, notably from nearby Westgarthtown, including the Ziebell, Maltzahn and Winter brothers, before most of these leases were acquired by commercial dairies who supplied fresh milk to Melbourne. That of TH Baker was said to have been the largest in Victoria in the late nineteenth century, and that of JS Morgan one of the largest. The surviving dry stone walls on the Campbell estate are the only known remaining association with these large dairies, and contribute to an understanding of Epping's history as one of the earliest and most important dairy regions in Victoria. (Criterion A)

The precinct is also significant for its association with the Campbell family, leading Sydney merchants, politicians, and builders of the *Duntroon* and *Yarralumla* pastoral properties in Canberra. (Criterion H)

The Campbell dry stone wall precinct is ***scientifically*** significant to Victoria. (Criteria A, B, C) The potentially early-1840s date of some of the cultivation paddocks warrants further historical and archaeological investigation. The farms date at least to the 1850s, the period during which the Merri Creek was the granary of Port Phillip, with mills at Campbellfield and Kalkallo; the cultivation paddocks on the former *Maryfield* farm and on the O'Herns Road–Merri Creek farms thus constitute rare and likely unique evidence of this first phase of cultivation in Port Phillip prior to the sudden switch to grazing in the early 1860s. Its later fabric, previously identified as being an exceptional and rare early Victorian farming complex, is also of potential state archaeological significance. The precinct has high potential to interpret, and educate, regarding the early history of farming on the Merri–Darebin Plains stony rises, and in Port Phillip.

A primitive horse drawn stony-carrying sled, once used to move fieldstone across paddocks to build dry stone walls, found on the former *Maryfield* property, is the only known example in Victoria of this once common vernacular technology. (Criterion F)

The Campbell dry stone walls precinct is also ***aesthetically*** significant to Whittlesea. The walls range from poor condition (as is typical, especially those of potentially very early age) to excellent condition. Some, over stony rises, are of high integrity, displaying the formal structural qualities of inherited traditions and the craftsmanship associated with use of local stone. Some are enhanced by the informal aesthetic values of their isolated rural settings. (Criterion E)

# Chapter Five (Precinct No.2)

## 'Westgarthtown German Settlement'

### The Potential Precinct

The original square mile Westgarthtown settlement and its dry stone walls have largely been destroyed by suburban development. However parts of the settlement survive, notably five stone dwellings some with outbuildings, with the Wuchatsch property on Robert Street the only one known to retain associated dry stone walls. However the reserve for the original school, church and cemetery, the social and physical heart of the former settlement, is largely intact, and retains substantial portions of dry stone walls, including the enclosure around the cemetery, parts of the church enclosure on Gardenia Road and German Lane, two internal walls, and the detritus of a wall near the creek on the east.

The landscape prior to settlement was very stony, with cultivable land between stony rises, as was typical of much of the Whittlesea dry stone wall area.

Edgars Creek (originally 'Dry Creek') flowed through the spine of the square mile section, and became the focus of the settlement's design and economy, in that the parallel roads built on its east and west sides provided all allotments with direct access to it. This resulted in an unusual and intensive complex of dry stone walls converging on the creek, and in places along the boundaries of the creek. Only scant relics of this distinctive pattern remain.

### History

*Pre-History: Cultivation Paddocks and Crown Alienation*

The parishes of Keelbundora, Wollert and Will Will Rook were put up for auction in 1838. Robert Campbell junior purchased three allotments around Crown Allotment 25, which would eventually become Westgarthtown.

Robert was part of a leading Sydney family who were entrepreneurial pastoralists with a history of assisting small tenant farmers. The cultivation paddock walls shown on the boundaries of Crown Allotment 25 in 1840s maps have been discussed previously (in the 'History' and 'Early Farms' sections above). It was concluded that these paddocks, partially enclosed with stone walls, were most likely built by tenant farmers of Robert Campbell junior.

The maps also include other information about the Westgarthtown site. The reason for the location of three of the four 'cultivation' paddocks on the boundaries of CA 25 can only be speculated. Perhaps the more mineralised soil near stony rises grew better crops. Or perhaps farmers wanted to be as close to fresh water as possible; not so much Edgars Creek (which early on became known as 'Dry Creek') but the 'spring' that is marked in 1848 on the east side of Edgars Creek at the very north of the site, where the cultivation paddocks are clustered. Springs between Darebin and Merri Creek had been a selling point noted in the 1840 Argyle Estate advertisements.

Whether the marking of 'stony rises' in the south-west corner of CA25 on 1840s maps indicated that this land was more stony than surrounding areas is uncertain.

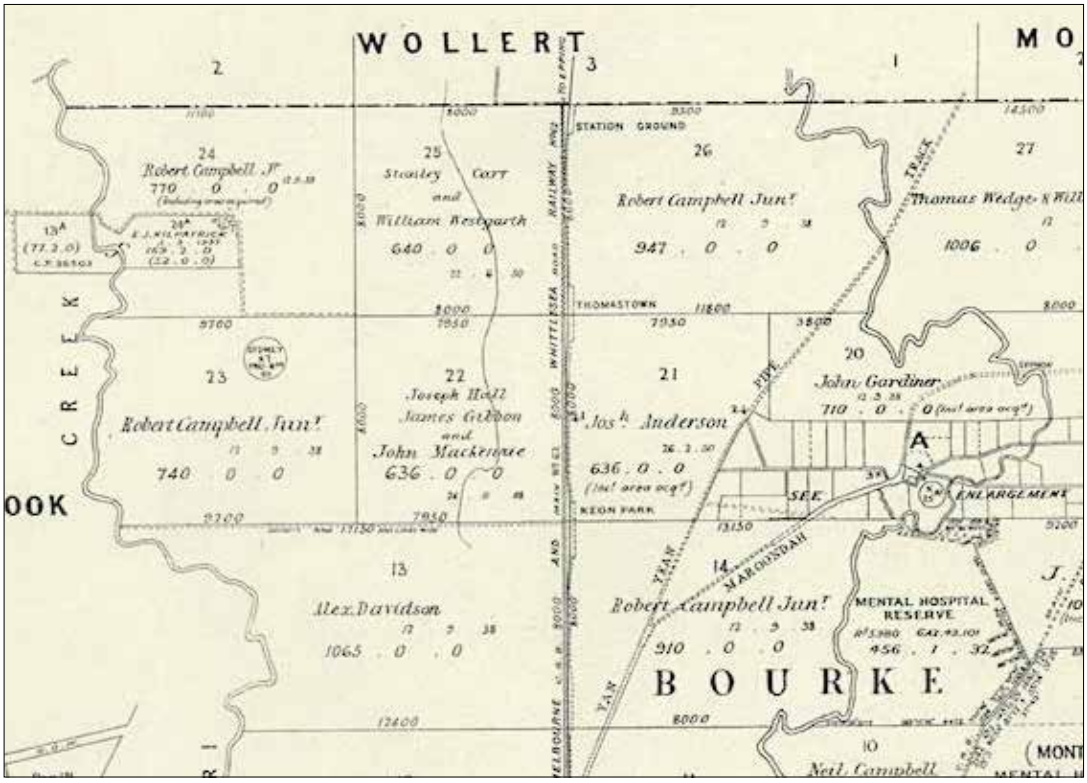


*Image 95: Squatter Robert Campbell Junior was the major buyer of Parish of Keelbundora allotments on the Merri and Darebin Creeks at the 1838 land sales; he purchased four oversize Crown Sections totalling 3367 acres. The 640 acre Crown Section 25 (top centre) that became Westgarthtown was one of three CAs (21, 22, 25 ) in this part not sold in 1838. (Parish of Keelbundora)*

However CA25 had twice before been rejected by purchasers, in 1838 and again ten years later. A handwritten note on an 1848 plan records that on the 8th August 1848 the Crown again offered it for sale, together with its unsold neighbours Crown Allotments 21 and 22, at £1 per acre, and that no offer was made for CA25. A later note refers to Robert Hoddle's letter of 19 March 1850 advising that CA25 had been 'selected by Messrs Stanley Carr and W Westgarth under the provisions of the Act of Parliament'.[356]

*The History of Westgarthtown*

The history of Westgarthtown as a unique intentionally designed and settled ethnic rural village is well documented, and its heritage significance is acknowledged by its inclusion in City of Whittlesea Heritage Overlay; its registration by the National Trust; and the Victorian Heritage Register's inclusion of the Ziebell, Wuchatsch, Graff, and Siebel farmhouses, and the Lutheran church and cemetery reserve. Its history is the subject of publications by Robert Wuchatsch and others.

[356] PROV, Historical Plan 'Sydney K7, 10/4/1848

Few Germans came to Victoria before 1849 and Melbourne merchant and politician William Westgarth promoted the idea of German migration to Victoria, having observed their 'industry, frugality, sobriety and general good conduct' in South Australia. Obtaining support from the British government for the migration costs of 'vinedressers', he made further arrangements in Germany, and in the Victorian parliament. In 1849 and early 1850 ships arrived from Germany with families, many bound for Westgarthtown: Franke, Graff, Karsten, Maltzahn, Peters, Rosel, Winter, Wuchatsch, Ziebell, Zimmer, Gruenberg, Heyne, Knobloch, Kawerau, Wanke, Siebel, Groening and Timm. Some were Wendish (or Sorbian), a Slavic race living south-east of Berlin with a distinct culture and language.[357]

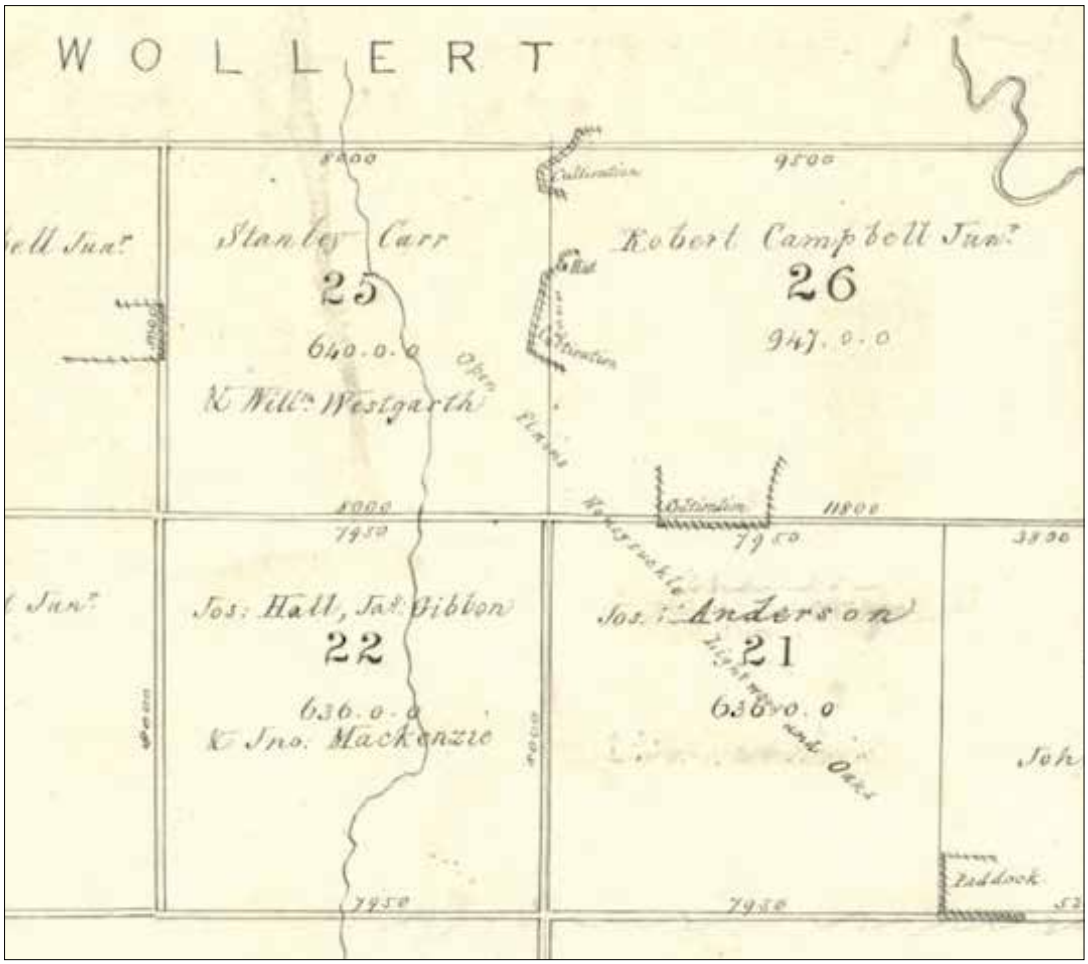


*Image 96: The square mile of Crown Allotment 25, which became Westgarthtown, with 'cultivation' enclosures, appeared on plans in the early 1840s, 1848, and again here in 1858. Natural features including the 'stony rises' and the 'spring' are no longer shown by 1858. While the map has not been updated to include the Crown purchasers, notably some man-made elements, including the western 'hut', and a 'brush fence', previously shown on CA22, no longer appear. However the cultivation fences, presumably more sturdy dry stone walls, remain. (PROV Historical Plan: FEATR470 1858)*

[357] Most of this section derives from Robert Wuchatsch's history at: westgarthtown.org.au

In March 1850, Westgarth and Captain John Stanley Carr, an Irishman of long residence in Germany, purchased the 640 acre Crown Allotment 25, Parish of Keelbundora, at £1 per acre, in trust for the settlers. Ten acres were reserved in the centre of the area for a church, cemetery, school and shops. Each settler received a creek frontage, and in keeping with the German model the land between the creek and the house was used for vegetable and orchard production, while the land extending to the rear was for pasture.[358] Legal access was obtained to the spring in the north of the area. A Lutheran school opened in 1855, and the church (the second oldest Lutheran church building in Australia) opened in 1856. For over 100 years, the church served as a unifying force and focal point for Westgarthtown's activities. The purpose-built school building (1867) was demolished in the 1950s. Some 200 people are buried in the cemetery.

Dairying was carried on at Westgarthtown from 1850-1972. Farming was initially subsistence, but during the 1850s' gold rushes the settlers began to produce dairy products, hay, chaff, vegetables, fruit and eggs for sale on a commercial basis, mainly in Melbourne. By 1860, dairying had emerged as the mainstay of the area's economy, and remained so for over a century.

Westgarthtown was the cradle of German small farming settlement in the Whittlesea municipality, and appears to have become the threshold which welcomed other German settlers, such as the Schultz, Hehr, Bindt, Lehmann and Unmack families to the area. They were joined by children of the original Westgarthtown settlers, and some of the original Westgarthtown settlers themselves, who purchased in the 1853 Parish of Wollert land sales, or leased land from absentee landlords. By the 1860s Germans had prospered and comprised a major ethnic group in the region from Preston to Woodstock, with Wollert and Westgarthtown being hubs. The 'European village' character described by Meredith Gould in the 'Harvest Home Lane' heritage precinct was essentially the outcome of the concentration of German settlers in that area. Indeed, by the 1860s the Germans constituted a significant, and possibly the largest single ethnic group amidst the Wollert small farmers, many of whom soon intermarried with Anglo-Celtic neighbours, including, in the nineteenth century, the Adams, Glover, Young and Brock families.

During the 1930s, Westgarthtown's milk was retailed in Preston by Westgarthtown's Albert Siebel. In 1934 Siebel established the Pura Dairy, which is now one of Australia's largest brands.

From the late 1940s and through the 1960s Westgarthtown's farms were subdivided for suburban development. Finally, in 1972, the Ziebell and former Grutzner properties were sold. The only Westgarthtown land which now remains intact is the Lutheran church and cemetery reserve.

Westgarthtown today is described by the National Trust as 'one of Victoria's most distinctive ethnic settlements, whose heritage reflects the historical circumstances of settlement, German vernacular building traditions, and the geology and conditions of the area.'[359]

While dry stone walls are recognised in the citations of the Victorian Heritage Register as contributory to Westgarthtown farmsteads and the Lutheran church precinct, they are not specifically described, or assessed. This assessment reveals that the walls themselves are also of interest in terms of their structure.

[358] Geoffrey Borrack, 'Romancing the Stone', in Ellem, Lucy Grace (ed), *The Cultural Landscape of the Plenty Valley*, Plenty Valley Papers Volume 1, La Trobe University, 1995, p.54
[359] 'Westgarthtown, Thomastown & Lalor-Group', National Trust of Australia (Victoria) File No.B5597

*Westgarthtown in its Setting*

The Westgarthtown community remembered the light horsemen and infantry from the Broadmeadows Army Camp who trained across the 'black soil plains' in 1914-18. The troops appreciated the fresh cool well-water and boiling billy tea provided by the families. One later recalled Westgarthtown for its 'stone walls and the grateful shade of the pine trees'.[360]

John Borrack's descriptions of the 'rudimentary' surrounding landscape in the mid twentieth century suggest why Westgarthtown might have been regarded as such an oasis of civilisation in a wilderness. In his imagination land to the west was a 'Never Never Land' whose 'golden grass, a tangle of thistles, briars, docks and the cracked volcanic soil' sweltered in summer:

> 'The basically flat topography was interspersed regularly by low hillocks or mounds and basalt outcrops – volcanic residuals – referred to as stony rises, mesas or buttes. These scarcely indented the straight horizon unless one sat low on the ground, but their declivities, often unpredictably, formed morasses or small swamps. In the spring and the winter they filled with water. The earth oozed like an over saturated sponge and the black mud, as sticky as glutinous cake mixture, clung to shoe or boot … When the sky was overcast, the gleam of the water, broken and swathed by dark reflections, contributed to the stark lonely beauty of that landscape. Apart from a few twisting sheoaks and some straggling wattles that leant southwards in deference to the perpetual … fierce northerlies, there was … only an intermittent hawthorn bush, until one approached closer to the Merri Creek where a variety of indigenous species … became more profuse. Sometimes one would alight on the remnants of a shattered stone wall that marked the aspirations of a long departed settler.'[361]

Borrack's recollections highlight Westgarthtown as a bountiful enclave in an exposed and isolated expanse, 'that harsh landscape of bleak stony plains and wide horizons'. Closer to civilisation the outlook appears to have been only marginally improved, as he recalled 'the long lonely Epping Road, bordered on the west by the thistle wastes of Callaghan's farm'.[362]

*The Dry Stone Walls of Westgarthtown*

<u>The German facility with stone</u>

While early purchasers had shunned the stony ground of CA25, the Westgarthtown settlers embraced it. William Westgarth recorded the 'scramble' of the German settlers for allotments:

> ' … each tried, in most cases, to get trees, stones, and rocks in preference to clear ground, as if so much additional wealth. The trees might have had value for firewood, but in the other items they had probably more than they bargained for.'[363]

[360] Borrack, 1988, *op cit*, pp.26-27
[361] *ibid*, p.19
[362] *ibid*, pp.14,15
[363] William Westgarth, *Personal Recollections of Early Melbourne and Victoria*, 'The German Immigration', Project Gutenberg ebook 'Early Melbourne and Victoria': http://www.gutenberg.org/cache/epub/5789/pg5789-images.html

Wuchatsch notes that while Westgarth might have found the attraction of rocky ground amusing, the Germans saw in the 'basalt scarred volcanic landscape':

> 'God-given materials with which their dreams could be fashioned into reality. Not only did they possess physical strength in abundance, but their familiarity with stone as a building material, adaptable for many purposes in construction, derived from their former German environmental traditions. Although it is true that many settlers in the region, whether German, British or Irish, utilised well the stone that abounded, the Germans proved to be masters in its use. Those buildings that survive today are testimony to the degree to which they applied their energies, fashioning hard, misshapen boulders into manageable rectangular blocks with regular flat faces.'[364]

Style

Wuchatsch, and others, have observed that the Westgarthtown farmhouses, barns, stables, milking sheds, churches and schools:

> 'maintained simplicity of form, exhibiting and almost complete lack of applied ornamentation. They combined function with strength, reflecting well the solid, simple farming lives of the inhabitants.'[365]

The dry stone walls of the German settlement appear to have been similarly rudimentary, eminently practical, and adapted to their purpose rather than being designed or finished for aesthetic effect.

Historical photographs show that many if not most Westgarthtown walls, and those built by their German countrymen and children in Epping and Wollert, conformed, as far as the local stone would allow, to British conventions in terms of verticality, height, and use of coping stones.

The incorporation of oversize stones is a notable feature of walls throughout the Merri-Darebin dry stone wall area. Westgarthtown appears to have had a notably high proportion of massive stones, both split and round, used in lower courses of walls. This was almost certainly the result of the Germans' grubbing or quarrying building materials from the plentiful stony rises of Crown Allotment 25.

The Westgarthtown walls then include a notable proportion with huge stones, usually split, uncoursed, in a completely random-rubble formation. The visual effect is a pronounced style of wall that matches the National Trust's description of the 'cyclopean' appearance of some of Westgarthtown's stone dwellings and outbuildings.[366]

Walls in the Townscape

As elsewhere, the Westgarthtown dry stone walls delineated property boundaries. But the small rural allotments and consequent intensity of settlement meant that walls were unusually dense. They were a prominent part of mid-twentieth century Westgarthtown streetscapes depicted in the pencil sketches of artist John Borrack.[367]

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[364] Wuchatsch, 1985, *op cit*, p.58
[365] *ibid*
[366] 'Westgarthtown, Thomastown & Lalor-Group', National Trust of Australia (Victoria), File No.B5597
[367] Borrack, 1988, *op cit*, Appendix pencil drawing 'Ziebells looking south from German Lane'

*Image 97: 'Ziebells looking south from German Lane' (ie along Gardenia Road with Ziebells' farmhouse on the left), John Borrack pencil drawing of mid-twentieth century Westgarthtown. Although by this time somewhat tumble-down and topped-up with post & wire, the walls remained prominent in the foreground of Westgarthtown streetscapes. (Borrack, Lamplight and Bluestones)*

Given the centrality of the creek in the design of the town, with all properties having access to it, the views of dry stone walls from the plain above added to their presence in the townscape.[368] They were also a part of the Westgarthtown lifestyle, lyrically depicted by Borrack: the cultivation of lucerne, rye and maize crops on the flats near the creek; and the musings of a boy 'sitting on a rock or a wall in a patch of sunlight or shadow somewhere in a remote field …'.[369] Borrack's cemetery was 'where the stone walls mellowed and warmed by sunlight define the eternity of the settlers …'[370]

The walls associated with the former Wuchatsch homestead at 74 Robert Street are the only known surviving private walls; their visual link with Edgars Creek is a relic of the original 'townscape'.

The remaining precinct of dry stone walls is associated with the Lutheran church and cemetery reserve. These constitute the western and northern road boundaries of the reserve, as well as the eastern and southern sides of the cemetery; there are also other walls directly south and west of the church. All these walls are in fair to good condition, although the cemetery wall is much reduced in height, as can be seen in an early photograph (Image 113). Along the eastern boundary of the reserve, parallel to the creek, the flattened and spread ruins of a wall appear to constitute the majority of the material of a former wall.

[368] Eg, images in Robert Wuchatsch, *Westgarthtown: The German Settlement at Thomastown*, Robert Wuchatsch, Melbourne, 1985, opposite page 46, and p.60
[369] Borrack, *op cit*, p.19
[370] *ibid*, p.35

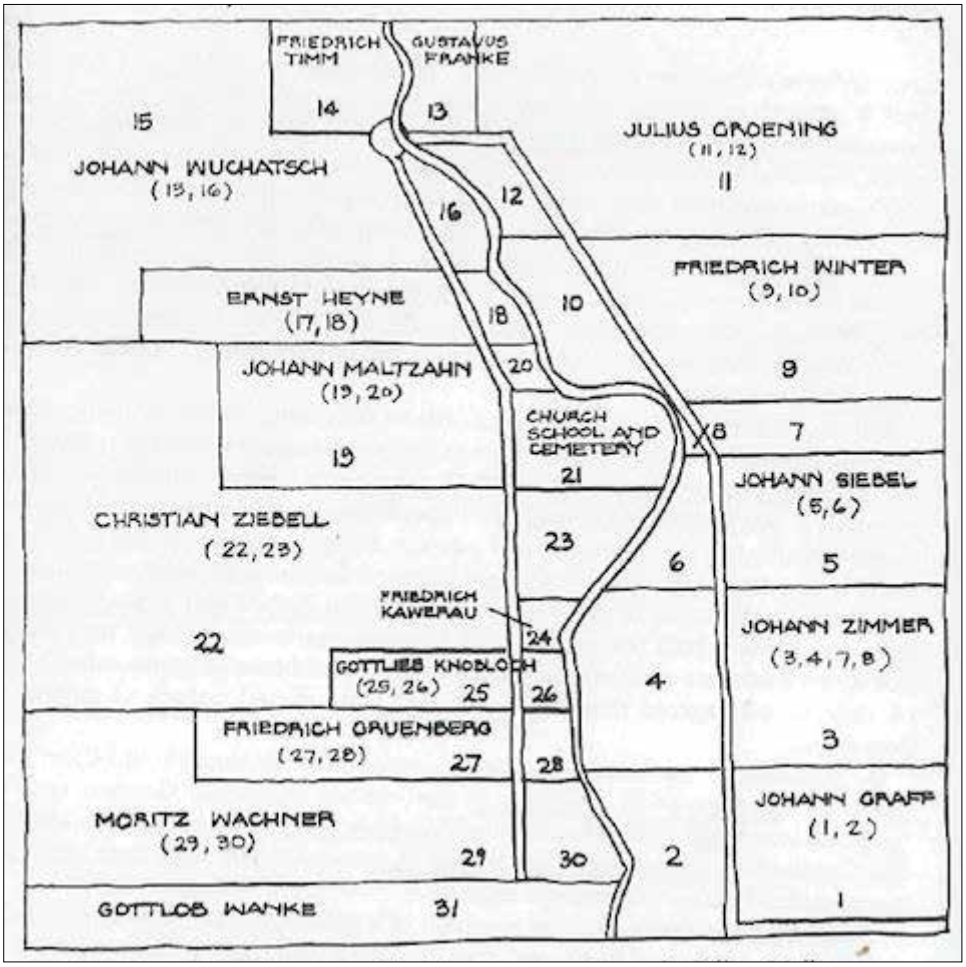


*Image 98: A reconstruction of the original plan of Westgarthtown shows the central church, school and cemetery reserve, and the layout which enabled every landholder direct access to Edgars Creek. (Wuchatsch, Westgarthtown, 1985, p.19)*

These walls are a constituent part of the heritage of the reserve, which is central element in this most intact surviving German settlement in Victoria.[371] Westgarthtown is also of outstanding historical significance to the state of Victoria for its association with the state's promotion of German settlement in Victoria. The reserve's location at the centre of the 640 acre settlement reflects the pivotal role of the church in the devout Lutheran community. The reserve is also significant for its important association with William Westgarth, a notable pioneer of Victoria and MLC, who was directly responsible for the German immigrant communities in Victoria. The 1856 church is the oldest surviving Lutheran church in Victoria.

The primitive stone walling in and around the reserve is also significant in complementing the small size and simple craftsmanship of the church, and in delineating and securing its important original free-standing setting and sense of place.

[371] City of Whittlesea, Heritage Overlay HO899.

Similarly, the dry stone walls define and preserve the cemetery, which contains the graves of many of the original German settlers.

*Farm Walls*

A newspaper report of early 1851 told of the rapid progress of Westgarthtown in just ten months, including some remarkable stone wall construction:

> 'The settlement comprises a section of six hundred and forty acres, upon which ten domiciles have been erected. One of the residents Mr Ziebell has upwards of a hundred acres surrounded by a high and substantial stone wall.'[372]

Part of Ziebell's walled area was a garden, while 'a considerable portion of the land has been brought into a state of cultivation'. As the original Ziebell property was 102 acres, this description was almost certainly of the farm boundary wall; the separate garden area might also have been walled.

The 1930s photograph of the Ziebell 'paddock' wall by Augusta Borrack shows a boundary wall, perhaps part of the wall described in 1851. It is no longer 'high', but has been topped-up by the addition of timber posts and wire. John Borrack remembered the paddock as having 'fizzled out at a low partly derelict stone wall supplemented by a few strands of barbed wire drooping forlornly on wooden droppers.'[373]

***Image 99:*** *Henry Ziebell and Clydesdales beside dry stone wall in 'the top paddock', 1930s, photographed by Augusta Borrack. (Borrack, Lamplight and Bluestone, 1998, pp.18, 20)*

[372] Rob Wuchatsch, 'Ziebell's and Grassman's Gardens 1851', citing the *Melbourne Daily News*, 8th January 1851, in *Elements of Westgarthtown*, 'Water', Vol.22, No.1, April 2018, pp.12-13

[373] Borrack, *Lamplight and Bluestone*, 1998, *op cit*, pp.18, 20

The rapid construction of Ziebell's dry stone walls was extraordinary, especially at a time when building of a dwelling, outbuildings, securing the water supply, and cultivation were also necessary. The 1851 report noted that neither had the other settlers been idle in the face of 'considerable difficulties, the land being on the whole stony'.[374] By the late twentieth century Ziebell's 'high and substantial' stone walls were not observed to be different to the other walls at Westgarthtown.[375]

Westgarthtown farm walls also continued the tradition of the 1840s 'cultivation' walls on the boundaries of the Robert Campbell junior Crown Allotment 25. While boundary walls were necessary to contain farm stock, and to protect crops from native animals and stray stock, they were also necessary to protect crops from the farm's own dairy cattle, as milk became the staple of Westgarthtown farming during the gold rush. Patchworks of walled, irregularly shaped cultivation paddocks, set between the rocky outcrops, are visible in mid twentieth century aerial photographs. These characteristic Whittlesea dry stone walls likely dated to the 1850s. Irregular shaped paddocks were either stony or free of stone, depending on whether a stony rise or arable ground predominated in a particular area, recalls Rob Wuchatsch.[376]

Except for a few sections near the Wuchatsch dwelling, none of Westgarthtown's farming walls now survive.

***Image 100:*** *Aerial view of the northern part of Westgarthtown, 1945, showing Wuchatsch property to west of creek, and Nebel property to the east, and a patchwork of irregular stone walled paddocks. The narrow dark paddock on the Nebel property, angled towards the creek, was a walled-off (enclosed) stony rise; the small triangle mostly visible on the left was also a walled-off rocky area. Conversely, walled-off (enclosed) cultivation paddocks are also visible. (Melbourne & Metropolitan Project, December 1945)*

[374] Wuchatsch, Elements of Westgarthtown, *loc cit*.
[375] Rob Wuchatsch, email correspondence, 30 May 2019
[376] Rob Wuchatsch, email correspondence, 25 May 2019

*Stream Walls*

The 1850 subdivision of Westgarthtown was meticulous in ensuring that every settler had access to water, and the stream that passed through the middle of the 640 acre allotment constituted the boundary of most properties. Presumably to prevent stock from straying onto the property on the opposite side, and perhaps to manage home cattle access to and fouling of the stream, walls were then built on alternate sides of the creek bank.

These walls were 'retaining walls of dry stone'.[377] As the pair of photographs below show, walls were built along the actual waterline; Robert Wuchatsch observes that their construction would have taken a lot of work.[378] The creek is now a concrete drain for most of its length through Westgarthtown, and no examples of this type of wall survive there.

However two similar retaining walls were later built as part of drainage systems on Schultz properties between Lehmanns and Bridge Inn roads. These walls survive (see previous section, 'Historical Context'). Excavation of the prepossessing, exceptionally constructed wall on the Bridge Inn Road property revealed a base of stone spalls in the stream, no doubt to protect its foundations from being undermined.

These stream walls are very distinct in purpose and plan, rare in Victoria, and an impressive part of a distinguished German legacy of dry stone walls in Whittlesea.

***Images 101, 102:*** *Left: Former Edgars Creek wall on Graff's farm (Robert Wuchatsch, 1959). Right: the former (lower) wall also lines the creek on the opposite side of the Wuchatsch property, c.1943. (Robert Wuchatsch)*

[377] Rob Wuchatsch, email correspondence, 23 May 2019

[378] My experience, in simply dismantling and recording a small part of the Schultz stream retaining wall (below), built within the glutinous 'Merri Creek' black clay, supports this assessment.

*Image 103: Wuchatsch farm, Roberts Street. Creek boundary wall in foreground; a wooden gate between old and new walls; milking shed behind. (State Library of Victoria, John T Collins, 1977, 'Thomastown. Wuchatsch Farmhouse 74 Robert St')*

*Image 104: The other side of the same wall, now without gate, sloping to Edgars Creek. This is the last known surviving example of an original and defining feature of Westgarthtown: the array of dry stone walls – on property boundaries and along the creek banks – gathered along this core of settlement. (David Moloney, 2019)*

*Image 105: Ziebell's Farmhouse and outbuilding before restoration. The rudimentary, oversize and apparently turbulent construction of the Gardenia Road dry stone wall matches the random rubble construction of the residence behind, described by the National Trust as 'almost cyclopean.'[379] (The outbuilding wall by contrast is very roughly coursed.) (State Library of Victoria, Collins, J. (1967). Thomastown [German Town]).*

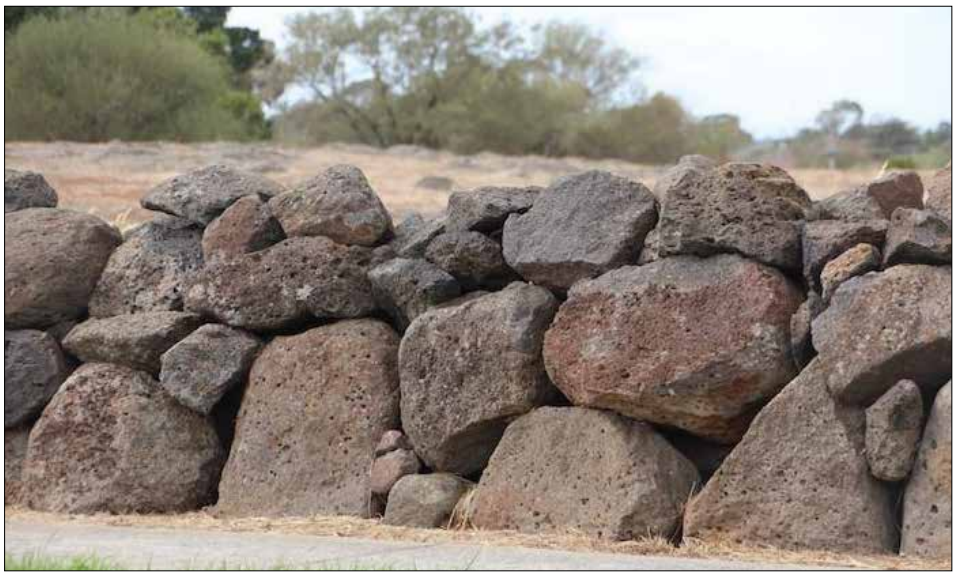

*Image 106: The practical craftsmanship of this same Gardenia Road wall is more evident here. The difficult, oversize stones, which have likely been grubbed from the stony rises on the church reserve behind, have been carefully positioned and their split flat surfaces arranged to present a relatively smooth and battered wall face. It appears to have been repaired, but its original form was that shown in the 1885 photograph (Image 113) of the nearby cemetery wall: higher and with coping stones intact. (David Moloney, 2019)*

[379] 'Westgarthtown, Thomastown & Lalor-Group', National Trust of Australia (Victoria), File No. B5597

***Images 107, 108:*** *Two views of an early wall at the former Wuchatsch homestead, an example of the Westgarthtown 'cyclopean' style, using oversize unworked rounded stones, with minimal vesicularity, held together by their weight, and judicious placement of smaller stones. While large, these stones are fairly uniform in size, without more massive stones intruding, which enables a semblance of coursing. The wall is typical of Westgarthtown walls in terms of its large stone.*

*The wall is 1450-1600 mm at the base, more than twice the 610 mm minimum width prescribed in the Fences Statute. While historical photographs show that not all walls in Westgarthtown were quite so wide and stout, the evidence of Rob Wuchatsch (email correspondence, 29/5/2019) and field studies of other local walls, is that all Whittlesea walls were built wider than standard base widths, and that many were substantially wider. (David Moloney, 2019)*

*Image 109: By 1934 these walls beside the Maltzahn house on Gardenia Road were past their best. But the essential character of this type of wall, not uncommon in Westgarthtown, is similar to that of the Ziebell farmhouse (above) and even some walls of buildings, described as 'cyclopean' (oversize unworked stone, in rubble construction). (State Library Victoria, 'Typical German farmhouse, Thomastown', John Kinmont Moir, 1934)*

*Image 110: Looking east over Nebel's farm, in the north-east corner of Westgarthtown, c.1910, showing dry stone walls around a stony paddock. The walls appear to be of a more conventional, high and vertical, construction, and to retain most of their original coping. (Photo: per Rob Wuchatsch)*

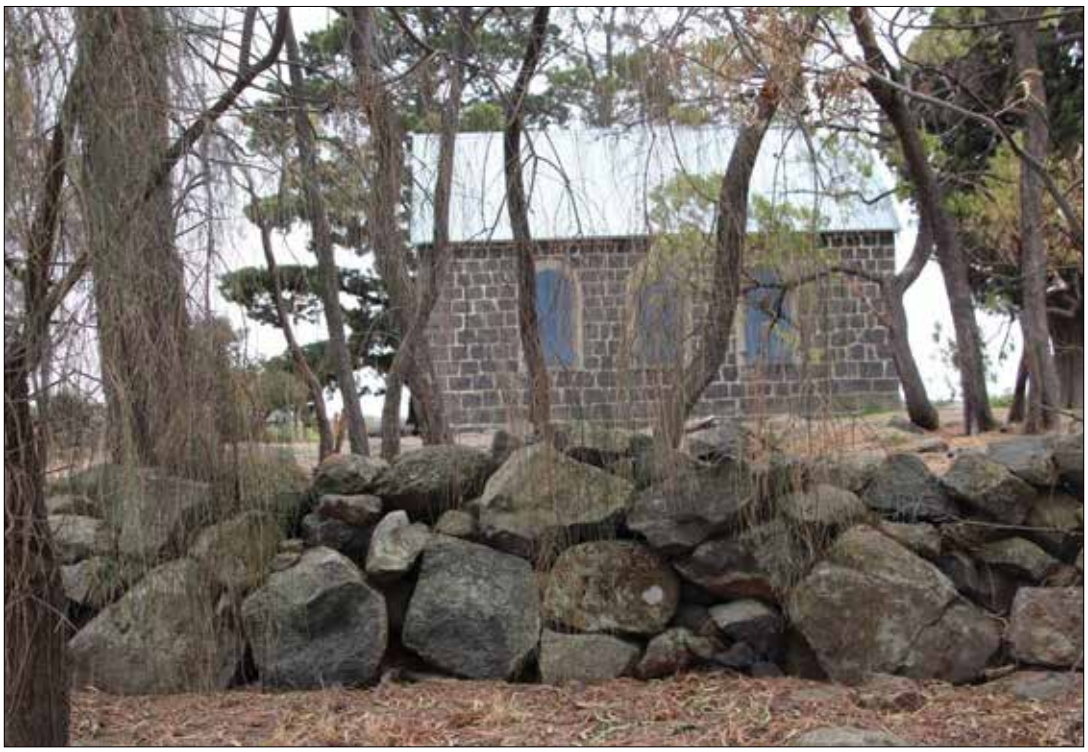

***Image 111:*** *Stone wall south of Lutheran church. (David Moloney, 2019)*

***Image 112:*** *East-west dry stone wall on the stony rise south of the church. Many oversize, and some massive stones have been used. (David Moloney, 2019)*

*Image 113: The original Westgarthtown cemetery wall visible in background, which is apparently relatively vertical, of conventional height, and with coping stones, c.1885 (Photo: per Robert Wuchatsch)*

*Image 114: The same corner of the cemetery today, with missing upper courses and copestones. (David Moloney, 2019)*

*Image 115: On stony rise near the cemetery, weathered by expanding and contracting moisture in a crack of the volcanic stone, a surface of the rock has broken away naturally (left); these concave stones (right) were often picked up (or easily knocked off the rock) and became 'coverbands' to bed the copings. (David Moloney, 2019)*

*Image 116: One of the walls on the former Wuchatsch property, built by Norman Wuchatsch in 1962, demonstrating the transfer of walling skills through the generations. (David Moloney, 2019)*

*Image 117: Walls converging on and along the creek are visible in this early photograph. The original properties were Heyne and Maltzahn (west) and Winter (east). (Melbourne & Metropolitan Area, 1946)*

## Statement of Significance: 'Westgarthtown German Settlement'

*What is Significant?*

The Westgarthtown German Settlement, established in 1850, was the realisation of William Westgarth's vision of bringing industrious Germans to Victoria as farmers. The 640 acre allotment was originally subdivided into 16 allotments on both sides of Edgars Creek, with a centrally located reserve for the Lutheran church, cemetery and school. The German settlers used the stone to build farmsteads, outbuildings, their church, and now-demolished school. Dry stone walls were also erected immediately, for property boundaries, kitchen orchards and gardens, and to separate stony from arable land in the organic style that characterises the Merri-Darebin Plains.

Westgarthtown flourished and most families moved on to larger farms in the district, becoming prominent leaseholders of the extensive Campbell landholdings to the north-west and west, and purchasers of many of the c.150 acre farms sold by the Crown in Wollert in 1853.

Westgarthtown has been redeveloped for suburban residential purposes, compromising the settings of the remaining stone farmsteads and outbuildings of the Ziebell, Wuchatsch, Siebel, Graff and Maltzahn families. However the central reserve, with its church and cemetery, remains substantially intact. The dry stone walls built along the greater part of the Gardenia Road and German Lane boundaries of the reserve, and also enclosing the cemetery, are a prominent and contributory feature of what was once the core of the community.

Other dry stone walls remain near the church. The only known remaining dry stone walls associated with Westgarthtown farming are very small sections at the former Wuchatsch farmstead, one of which was built, and another modified, in the late twentieth century.

With the exception of a largely-demolished dry stone wall on the Edgars Creek frontage of the reserve, the condition of the walls varies from fair to good.

*How is it Significant?*

The Westgarthtown German Settlement dry stone walls are of historical, scientific, aesthetic and social significance to Victoria, and to the City of Whittlesea.

*Why is it Significant?*

The dry stone walls in the Westgarthtown German Settlement express the natural history of the area, and the cultural history of its human modification. They are particularly associated with the history, function, and materials of the distinctive stony rises landscape.

The Westgarthtown precinct is ***historically*** significant to Victoria for its association with Melbourne merchant, politician, memorialist and amateur geologist William Westgarth and his international campaign to attract industrious German farming families to Port Phillip. It is rare evidence of a pre-gold-rush rural settlement, and is unique as a planned, ethnic farming settlement. It became the cradle of the extensive German settlement in the Merri–Darebin Plains, particularly the Epping-Wollert area. They were an important part of the history of the district, and were prominent builders of dry stone walls. (Criteria A, B)

Most of the original 16 settlers became dairy farmers, some of whose families established dairies, or milk distribution centres, in the northern suburbs. Albert Siebel's 1930s Pura Dairy is now one of Australia's largest milk brands.

While early land purchasers had shunned this stony site, the German settlers embraced it as a source of building materials. They were experienced practical stonemasons, and quarried the many stony outcrops of the area not only to build distinctive dwellings and their church, but also for dry stone walls. The remaining walls reflect the pronounced stony rises geomorphology of Westgarthtown, and the formerly extensive network of walls that once provided a unifying visual link within the village. The walls contributed to the presence of Westgarthtown as a civilised oasis of settlement within the little-developed expanse held by absentee landlords. (Criteria G)

The Westgarthtown precinct is ***scientifically*** significant to Victoria. (Criteria C, F) These walls have lost the upper courses and copestones, but the lower courses, featuring oversize stone matching the random rubble construction of the adjacent Ziebell farmstead, are significant structurally, clearly demonstrating the local use of massive stones, and the technique of placing large plates of stone, which have fractured horizontally from exposed stony outcrops, on their edge, often on both sides of the wall. This technique contributed further to the distinctive character of construction of Whittlesea walls, in interrupting coursing and emphasising the cyclopean random wall-face, and in necessitating a wider base, and a more massive appearance, than conventional dry stone walls. The form of construction of Westgarthtown dry stone walls relates directly to its stony rises terrain. The precinct has the potential to contribute to information about the distinctive construction of walls on the Merri–Darebin Plains.

The Westgarthtown German Settlement dry stone walls precinct is ***aesthetically*** significant to Victoria. Dry stone boundary walls on Gardenia Road and German Lane, and around the cemetery, are a prominent foreground feature of the Lutheran church and cemetery reserve, in the heart of Westgarthtown. These walls, and those nearer to the Church, are an integral and highly significant part of the Westgarthtown heritage. The primitive walls complement the small size and simple craftsmanship of the church, and delineate and secure its original open setting and sense of place. Similarly, the dry stone walls define and preserve the cemetery, which contains the graves of many of the German pioneers. (Criteria A, B, E)

The proximity of many original walls to Edgars Creek, and views of this close pattern of dry stone walls from the slopes and plain above, once highlighted the role of the stream as the axis of the pioneering settlement. The few walls surviving on the former Wuchatsch property on Robert Street are a remnant of the once-numerous dry stone walls near and along the banks of this waterway, and are also the only known farm-related and townscape walls surviving in Westgarthtown. (Criterion D)

The Westgarthtown German Settlement dry stone walls precinct is ***socially*** significant to Victoria. (Criteria, A, G) The walls are a significant element to the central feature of the most intact German / Wendish precinct in Victoria. The cemetery, entirely enclosed by dry stone walls, has close associations with this ethnic group of pioneers; it includes monuments and epitaphs to the families of Graff, Nebel, Grutzner, Ziebell, Fiedler, Rosel, Seeber, Karsten, Peers, Maltzahn, Winter, Zimmer, Ewart, Siebel, Schultz and Wuchatsch.

Westgarthtown was also the gateway to the broader German settlement and significant impact on dry stone wall construction in the Wollert district. Its patchwork of cultivation and stony rises enclosures was similar to those in the Wollert district where there was also a preponderance of German settlers, and in particular on the properties of German settlers such as the Unmack and Wuchatsch families. Such complex and dense patterns of dry stone walls contributed to the 'Harvest Home Lane' conservation precinct described in Whittlesea's inaugural heritage study as having the character of 'a European village'.

Also, while none of the Westgarthtown stream walls survived the concreting of Edgars Creek, these were the forerunners of and likely models for those built later by the Schultz families in the Wollert area to drain swampy depressions, a common feature of stony rise areas. Dry stone walled diversion channels are known to have been built in Victoria principally by Aboriginal communities and by alluvial gold miners but examples on small farms do not appear to have been recorded in heritage studies. The former 'stream walls' of Westgarthtown appear to have been part of the remarkable unfolding story of German dry stone wall building in the City of Whittlesea.

# Chapter Six (Precinct No.3)

## 'Wollert Small Farming'

### Introduction

The Wollert Small Farming dry stone walls are a distinctive and important legacy of small dairy farming in the Melbourne area, and perhaps in Victoria.

The area is focussed on the Harvest Home Road area, which was identified in Meredith Gould's 1990 Whittlesea Heritage Study. Crown Allotment 11, Parish of Wollert, the area bounded by Harvest Home Road, Bindts Road, Lehmanns Road and Epping Road, was the core of her 'Harvest Home Lane Conservation Area'.[380] The intensity of dry stone walls in the area was, she said, an integral part of the significance of the precinct. The study described these walls as 'the best surviving example of extensive dry stone walling and close settled small scale dairy farms near Melbourne', and identified them as an integral and contributory component of the regionally significant 'European rural village' character of the Harvest Home Lane Conservation Area. Later heritage studies confirmed this assessment.

It is this intensity and complexity of dry stone walling that sets this precinct apart, in Whittlesea, and likely in Victoria.

Many dry stone walls in the Harvest Home Road conservation area have been lost as a result of recent suburban development in the Epping-Wollert district. Those which remain are among the most enduring legacies of early settlement, including the significant part in that by farmers of German ethnicity, and constitute one of the City of Whittlesea's most important links to its pioneering era.

Historical research now reveals that this area constituted the lucrative 'fresh milk', rather than 'butter-milk', dairy zone. Historical evidence is that farm sizes in this whole-milk area were smaller, which would appear to explain the remarkable density of walling in the Wollert Small Farming precinct.

While it has not been possible in this study to fully research the relative size of farms, the evidence clearly suggests that farms in this whole-milk precinct were notably smaller than in the butter dairy areas further out in the Woodstock Mixed Farming precinct. While there were many 'larger' farms in the Wollert Small Farming precinct, of some 200 – 300 acres, the typical fresh-milk German family farm appears to have been 50-150 acres, compared with a typical farm of 300-500 acres (again with exceptions, being smaller farms of some 150 acres) in the Woodstock Mixed Farming precinct, beyond the 15 mile 'fresh milk' band. This 15 mile zone extended to about the line of Craigieburn–Lehmanns Road, or a little beyond.

The gold rush was the turning point in this history. In 1853 the Crown sold the balance of the Parish of Wollert (and some of the Parish of Yan Yean on Donnybrook Road) in allotments of 150 acres, and the majority of allotments in the private Medland Estate in the Parish of Kalkallo were 50 -70 acres. In that sense the Medland Estate fits the 'small farming' designation of the Wollert / Harvest Home Road precinct. However while the 150 acre Wollert (Harvest Home Road) allotments were subdivided into smaller farms, the movement at Medland was in the other direction of consolidation. At Medland, beyond the whole-milk zone, dairying was for butter production, which required more land to be profitable. For these reasons the Medland Estate has been included in the Woodstock Mixed Farming precinct, rather than the Wollert Small Farms precinct.

[380] Meredith Gould Architects, 'Whittlesea Heritage Study 1990', City of Whittlesea, Ministry for Planning and Environment, 1991, 'Harvest Home Lane Heritage Conservation Area', Epping Area A.5.

## Description

The precinct comprises both sides of Epping Road between Harvest Home Road to halfway between Lehmanns Road and Bridge Inn Road, and the east side of Bindts Road from Harvest Home Road to halfway between Lehmanns Road and Bridge Inn Road. It includes the Schultz-built stream diversion walls between Lehmanns and Bridge Inn Road, one of which is slightly beyond this area.

The precinct includes dry stone walls along its road boundaries, and boundaries with adjoining properties, many of which survive. Given the relatively small size of these farms, the pattern of these walls is relatively intense. Even though only two or three can usually be seen from any given vantage point, the consistency of the walls constitutes a very coherent and important landscape. While many walls appear quite structurally intact, particularly those built on stony ground, many have naturally deteriorated over time and have been topped up with post & wire. Even where not structurally intact or prepossessing, the cumulative intensity of these walls gives them a high visual presence and impact as potential precincts.

Small farms, mainly for fresh milk dairying, generated the greatest number, the highest intensity, and the most distinctive dry stone walls in Whittlesea. The precinct features internal walls which contribute to the impact of dry stone walls on the landscape. Within some properties these walls are sometimes extraordinarily intricate and closely built. Many if not most are irregular in plan, having been shaped by the landscape of stony rises, greatly enhancing their visual and historical interest. Some are cultivation paddocks in the distinctive style of the study area.

In recent years the precinct has been subject to major urban residential development, and its integrity and condition have naturally been much reduced, with the loss of both road and the distinctive irregular internal walls.

The walls remaining along roads constitute the major presence of dry stone walls in the municipality. Although sections of the dry stone walls along both sides of Epping Road in this precinct have been lost, substantial sections of walling remain on both sides of the road, some evidently purposefully saved.

Despite the radical change in land-use, some important internal walls have also been carefully saved. The Hehr's *Pine Park* farmstead was identified for heritage protection and has been adapted for a new use within the redevelopment, together with some of its outbuildings. The preservation of the wall around the stony rise to its north-east, in its late-twentieth century condition with its wall-ends rebuilt in a plainly modern style, provides an excellent representation of a characteristic type and style of study area wall. All other walls in this area appear to have been demolished, including the horse yard, which was something of a landmark on Epping Road. Another prominent wall on Epping Road near Lehmanns Road was a wall whose serpentine form dramatically declared the typical landscape-shaped style of Whittlesea's stony rises walls.

Crucially, a remarkable complex of dry stone walls in the core of this precinct, at 80 Harvest Home Road, remains substantially intact. As evident in the historical Ordnance maps, historical aerial photographs, and current satellite images, this was and remains one of the most intensely built and intricate complexes of dry stone walls on the Merri–Darebin Plains. The 1990 City of Whittlesea Heritage Study also noted that its 'drystone walls dividing paddocks [are] particularly important.'[381] The report also noted a 'post and rail fence', which may have been that shown in Images 137 and 138, on its boundary with the Unmack family at No.90 Harvest Home Road.

[381] Meredith Gould, 1990, *op cit*, Site 1.25, 'Stone House, Milking Shed and Drystone Wall'

No.80 Harvest Home Road retains a c.1875 bluestone cottage and, crucially for the interpretation of this area, a bluestone milking shed. Both are conspicuously sited on the road, in the manner that contributed to the 'European character' of Gould's 1990 Harvest Home Lane precinct.

In addition, this property also has the exceptional advantage of historical documentation – an early twentieth century agricultural inspector's appraisal of its small paddocks – which definitively enhances the interpretability and heritage value of this farm and its complex of walls.

If parts of this site could be conserved, together with key walls east of Bindts Road, which remains in its rural state, together with the distinctive dry stone walls on the Schultz *Pine Grove* property north of Lehmanns Road, together with the road walls on both sides of Bindts Road, the essential integrity of the dry stone wall component of Gould's Harvest Home Lane precinct will have been preserved.


*Image 118: Purple Shading: Indicative proposed extent of 'Wollert Small Farming Precinct.' Red & Black Polygons: Properties with walls separating stony outcrops from cultivation paddocks (larger ones indicate larger or multiple paddocks)*

## Historical Context

*Small Farming, and Dairying in Wollert*

Several watersheds occurred in farming in the first few decades of the European history of Port Phillip.

The first was the widespread transition from tenant farming to freehold farming in the 1850s. People of limited means had new access to land as a result of the democratising impulses of the gold rush.

The change is dramatically illustrated in the Wollert parish plan. In 1838 the Crown sold 7783 acres of Wollert parish in 8 allotments, of average size 973 acres, to a single purchaser. This was the premier farming land in Wollert – the best watered lands along the Merri Creek and the Darebin Creek.[382] Fifteen years later, in 1853, the Crown sold the remaining 7040 acres of Wollert Parish (mostly now without access to permanent streams) in 41 allotments, of average size 172 acres, to 29 different purchasers.

The second watershed was the transition from cultivation to pasture in the Port Phillip District in the early 1860s. The concurrent advent of new dairy markets near major population centres saw dairying become a major part of this transition of small farming to pasture. As Melbourne grew in the 1860s and 70s, the study area supplied much of its escalating demand for fresh milk.

In the early 1860s cereal grain for human consumption was replaced by the feed crops of dairy farmers, and later, mixed farming. 'In winter the pasture feed was supplemented with hay or chaff and mangels, and in summer green fodder crops of oats and maize.'[383] It is likely that dry stone wall cultivation paddocks continued to be built in the study area in this period.

Several newspaper reports elaborate on the local farming. In 1921 the *Weekly Times* reported that 'The district of Wollert 'is one of the oldest milk producing areas in Victoria, and it is probably one of the least known.'[384]

Distance from the city, and transport, were the keys to this 'profitable industry' of supplying fresh milk to the metropolis. In the 1880s fresh milk dairy farming took place from 10 to 15 miles from the city, an area from Thomastown in the south and to between Harvest Home Road and Lehmanns Road in the north.[385] However, from 1915 improvement of the road as far as Woodstock, previously 'impassable in the wet months of the year', became a priority of the newly formed Country Roads Board. By 1921 it was reported of the road through Wollert to Woodstock that: 'no finer illustration of furnishing facilities for carrying on light or heavy traffic can be seen in any part of Victoria':

> 'Since the improvement to the main road was effected, about six years ago, the district has been substantially developed and marked progress is apparent everywhere. It is now possible to run large motor lorries at a rapid speed, and these vehicles are being utilised for transferring milk direct from the farms to retail distributing places through the city and suburbs. The work of the Country Roads Board has materially enhanced the worth of land at Wollert and properties that were valued at between £20 and £25 an acre less than 10 year ago, now are worth £35 to £40 an acre. While it may not be fair to attribute the whole of the increment that has accrued to road improvement most of it is undeniably due to that fact.'[386]

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[382] Cannon, M, MacFarlane, M, *Historical Records of Victoria, Vol.5: Surveyors' Problems and Achievements, 1836-1839* (VGPO, Melbourne, 1988), pp.127, 308, 309
[383] Peel, *op cit*, p.118
[384] 'Dairying at Wollert. Milk for the City: A Profitable Industry', *Weekly Times*, 14th May 1921, p.9
[385] 'Farming at Woodstock', *Melbourne Leader*, 9th June, 1883, p.10; 'Farming at Woodstock', *Melbourne Leader*, 16th June, 1883, p.10; 'Farming at Woodstock', *Weekly Times*, 9th February 1884, p.1
[386] *Weekly Times*, 14th May 1921, p.9

One effect of this was that the 15 mile 'fresh milk' dairy district now moved further north, into the 'district of Wollert', which was 16-17 miles from the city.[387] Clearly as a result of transport improvements, by 1948 Melbourne's northern whole milk zone was said to be 25 miles from the GPO, with the centres of trade being Campbellfield and Craigieburn.[388]

While there was some mixed farming, including horse breeding and production of hay for the city market (eg, by the Hehr Brothers), the Wollert area was primarily an intensive enclave of fresh milk production. 'The production of milk for the city trade claims the attention of every farm.'[389] The 1920s article describes the farming routine of Wollert:

> 'On wooden stands at various points milk cans may be seen awaiting the arrival of vehicles which transfer them to the city depots without delay. Carts containing several cans of fresh milk reach cross roads, and the cans are speedily placed on the motor and other lorries …'[390]

Further south at Westgarthtown John Borrack recalled the sight of a local farmer:

> 'horse whip held high, rubber caped against the weather, atop his spring cart laden with milk cans, as he initiated his dash around the cemetery corner, in transit to the milk stand at the end of Main Street.'[391]

***Image 119:*** *Epping Road, Wollert, 1921. Farmers transferring milk cans from horse drawn buggies to a motor lorry for transport to Melbourne. There were a number of pick-up points around the district.*[392]

The crops grown on 'the rich farm land' were for feeding milch cows and working farm horses: paddocks of oaten and wheaten hay were harvested, stooked, built into hay stacks, and cut for chaff for feed for all except the spring months. Crops such as maize and mangles were also grown for winter feed for the milch cows. There was no on-farm separation of butter milk, and no skim milk for pigs, which were not farmed commercially.

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[387] *ibid*
[388] Rothberg, Maurice, 'Victorian Dairy Farms: A Social Survey', State College, 1948, pp.73
[389] Eg, 'the Hehr Brothers'; 'Dairying at Wollert. Milk for the City: A Profitable Industry', *Weekly Times*, 14th May 1921, p.9
[390] *Weekly Times*, 14th May 1921, p.9
[391] Borrack, 1988, *op cit*, p.35
[392] Pascoe, R, *A Community Portrait: Lifetimes in the City of Whittlesea*, City of Whittlesea, 2001, p.84; 'Dairying at Wollert. Milk for the City: A Profitable Industry', *Weekly Times*, 14th May 1921, p.9

The Wollert farms were small, tailored to a niche industry, and intensively developed. The area had been sold by the Crown in 1853 for small farming, in allotments of c.150 acres. Unusually, these sales were followed by further private subdivisions into smaller farms again. In the interwar period, as the dairy industry boomed, local property prices soared, and as Wollert whole-milk farming was headlined 'A Profitable Industry', even the Closer Settlement Board created several new c.50 acre farms in the precinct. One of those properties, then occupied by JN Brock at No.80 Harvest Home Road, retains its intricate complex of dry stone walls.

Another c.50 acre Soldier Settlement farm on the former Wuchatsch farm south of Harvest Home Road, about 1.5 kilometres to the west, also had an exceptionally intricate pattern of walls but has recently undergone comprehensive suburban redevelopment.[393]

A 1951 report by a Soldier Settlement assessor interviewed D Wuchatsch, the First World War soldier settler living on the north part of the allotment shown (Image 121). Wuchatsch reported that he had made a quite comfortable living on the 50 acres he had been granted on Harvest Home Road. The assessor added that 'Wuchatsch is of the steadygoing industrious type and buys his own fodder', as did a large majority in the district.[394]

A little further west in 1853 Gottlieb Siebel had purchased a 158 acre allotment from the Crown (Sec 4 CA8) between Harvest Home Road and O'Herns Road. In the 1860s this allotment was held by C Seeber, J Lehmann and C Maltzahn in three lots of approximately 50 acres each.[395]

It is notable that all of the subdivisions of 150 acre allotments revealed to date have involved the German community.


***Image 120:*** *Map showing intricate and largely irregular complex of dry stone wall development in the area bounded by Harvest Home Road, Bindts Road, Bridge Inn Road, and Epping Road, an area of small dairy farms, mostly German. The elaborate pattern of walls – mainly cultivation paddocks – is the result of rocky knolls. (Ordnance Map, Yan Yean, 1938)*

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[393] Parish Plan, Wollert; Army Ordnance Map, Yan Yean, 1916
[394] Jennings, Sheehan, 2000, *op cit*, p.11
[395] *ibid*, pp.15, 17

With small farms, intensive specialised farming, and stony rises, presumably every part of the properties had to be used efficiently. The intensity of dry stone walls in this area is tangible evidence of the need to use land to best effect; there was limited clear land available for cropping, either for oaten hay or other stock-feeds. While post & rail fences were no doubt also used on the non-stony rises ground, dry stone walls were built in complex patterns, dividing arable and grazing lands. While not all of the walls are shown, the extraordinary intensity of dry stone walling of paddocks in this area is evident in the 1938 Defence Ordnance map, on which dry stone walls are plotted.[396] Nothing comparable has been found over this extent of area on the Defence Ordnance maps elsewhere in Victoria.

Until the technological developments of the late 1880s dairying was essentially a farm craft, firmly rooted in the traditional agricultural world, with pans to separate cream, and hand-operated butter churns and moulds. Family farms with small herds battled on through outbreaks of pleuro-pneumonia in the 1860s that could devastate herds, foot-and-mouth disease in the 1870s, and droughts.

However the proximity of the Campbellfield–Thomastown–Epping–Wollert district to Melbourne ensured the economy of its fresh milk industry for over a hundred years, from the 1860s to the 1960s, apparently with few changes. By the late twentieth century, especially as a result of bulk transport in the 1960s, the farms were comparatively small and inefficient, and competing with larger and more modern farms further out. The farmers were encouraged to cash in their lucrative milk contracts.

By the early 1860s some of the small German dairy farmers of Thomastown–Wollert had ventured into milk distribution and processing. In Preston during the 1930s Albert Siebel retailed the district's milk, and in 1934 established a company he called Pura, the beginning of today's dairy giant, Pura Dairy.[397]

[396] Army Ordnance Map, Yan Yean, 1938
[397] Wuchatsch, R, *Westgarthtown: A History and Guide* (Friends of Westgarthtown Inc, 2004), pp.11-12

*Image 121: Aerial photograph, 1947, showing most of the long north-south 1853 Wuchatsch 'Epping' farm between O'Herns Road (seen in the south) and Harvest Home Road (just out of view in the north). Situated in the small farm 'fresh milk' zone, the intricate landscape-formed pattern of mostly walled paddocks at top and bottom compare with 80 Harvest Home Road (Image 122). While this property has now undergone suburban redevelopment, some stony rises and walls have been preserved. These include a long length of the north-south property boundary wall west of the woodland and stony rises now near Vilcins Views. A curved internal wall along a stony-rise, north-east of the homestead, is now north of the Juggal Close. Two stony rises seen in the south of the photo have been preserved in a park between Goldminers Place and Godeffroy Parade; some evidence of former dry stone walls may survive. (Ad Astra, Aerial Survey of Victoria, 'Yan Yean CIA', 2.10.1947)*

## Precinct: Description and History

The network of dairy farms in the area generally centred on Section 11, Parish of Wollert, bounded by Epping Road, Harvest Home Lane, Bindts Lane, and Lehmanns Road, which was identified in the 1991 Whittlesea Heritage Study as the 'Harvest Home Lane Heritage Conservation Area'. It was assessed as being 'of regional significance as the best surviving example of extensive drystone walling and close-settled small scale dairy farms near Melbourne'.[398]

The area was identified as being especially distinctive: -

> 'Enhanced by the smaller Government subdivision of Allotment XI and the proximity to the township of Epping, this soon supported a large number of farms with houses grouped along the encircling road following the survey allotment boundaries. This gave to the area a somewhat European rural village character reinforced by the use of local stone for extensive drystone walling to divide the paddocks. Patches of this type of development occur throughout the western portion of the City of Whittlesea on the basalt flow, but this group of buildings and the landscape modifications with fencing is the most intensive and the most intact example. Development occurred from the 1850s notably at Unmacks farm and Timms house both illustrating a German involvement. The population did include a mixture of groups however, unlike the wholly German planned settlement at Thomastown.'[399]

The dwellings observed by Gould are said by local Mrs Sylvia Schultz to have been only a fraction of the number once there. A descendent of numerous local families, Mrs Schultz who lived as an adult on Lehmanns Road, remembered that in the early-mid twentieth century there had been small cottages 'everywhere' in this area, not only of farmers, but the dwellings of rural labourers. These workers were always in need of employment, and farmers such as CH Schultz had a group of men on hand to build a dry stone wall if required. Their cash payments were small, but were topped up by farm produce.[400]

At the 1853 Crown sales of small farms, Crown Allotment 11 Parish of Wollert, of 466 acres – the heart of Gould's Harvest Home Road precinct – was sold in four allotments. Purchasers were T Brown, W Swan, WF Cleeland – a large farmer in the Plenty Darebin district – and E Müller, a German. In the same sale members of the Siebel, Wuchatsch, and Zimmer families of Westgarthtown had each purchased 158 acre allotments immediately south west of CA 11. Other purchasers to the south west of CA 11 were a B Reilly, and Michael Lynch, a large land investor who lived in Kew, who purchased ten of these small allotments mainly in the drier western-central part of the Parish.

[398] Gould, M, Hicks, 'Whittlesea Heritage Study', 1991, A.5, Epping Area, pp.14-15.
[399] Gould, Meredith, 'Harvest Home Lane Heritage Conservation Area', Epping Area A.5, Whittlesea Heritage Study, 1991.
[400] Mrs Sylvia Schultz, personal conversation, 15/3/2013


***Image 122:*** *The southern part of 80 Harvest Home Road showing its elaborate complex of stony outcrops and dry stone walled cultivation paddocks, similar to those on the former Wuchatsch O'Herns Road property (see previous image). This is likely the best remaining example of an intense complex of dry stone walls in Whittlesea, the pattern determined by the stony-rises topography. It is enhanced by its early twentieth century Closer Settlement historical documentation, which provides rare interpretative material about farming in this stony knoll locality. It was also in the heart of Gould's Harvest Home Lane precinct. The western boundary retains a section of a once common but now rare composite stone and post & rail wall (Image 137, 138). (Google satellite, 2019)*

The story of the George Müller property provides an insight into the history of the precinct. As with other Crown allotments purchased by Germans in this precinct, less than five months after he had purchased his 150 acres for £472.16.4, Müller sold the southern half (75 acres) of this allotment to William (Wilhem) Koch for £750.[401] During the last half of 1853 the first flood of European gold seekers arrived in Victoria, and some at least of this price increase would reflect the beginnings of the great inflation of land values which occurred in the mid to late 1850s.

Müller and Koch may have been shipmates on one of the pioneering German immigrant ships to Port Phillip. The Dockenhuden arrived in Melbourne on 21st April 1849, carrying 'Georg Müller' a 29 year old 'engineer', his wife Josephine and two of her children by another marriage, and the 22 year old Johann Wilhelm Koch a 'shoemaker'.[402] It is unknown whether Müller ever lived on his Wollert property. By October 1850 he had purchased land at Collingwood,[403] and in November 1853 when he sold part of the property to Koch his address was given as Melbourne and his occupation as 'engraver'. At the same time Koch was described as a 'farmer', living in 'Wollert'.[404] Koch may have been leasing the Müller property prior to his purchase. Koch was a subscriber to the 'New Mecklenburg' (Westgarthtown) Lutheran school in 1855.[405]

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[401] PROV, VPRS 560/P/1548 (Torrens Application 54555); Search Notes for Torrens Application 54555, Registrar General's Office

[402] Darragh, T, Wuchatsch, RN, *From Hamburg to Hobsons Bay: German Immigration to Port Phillip (Australia Felix) 1848-185* (Wendish Heritage Society Australia, 1999), pp.45, 291-2.

[403] *ibid*, p.130

[404] PROV, VPRS 560/P/1548 (Torrens Application 54555)

[405] Wuchatsch, 1985, *op cit*, p.31

In 1855 Müller was also a subscriber to the New Mecklenburg Lutheran school, so it is possible he was living on the northern part of his Wollert allotment. He may also simply have been fulfilling an obligation as a local landowner and member (albeit absentee) of the local German community and Lutheran faith.[406] From April 1858 he certainly was not living there, as evidenced by a surviving lease of the land to a Robert Adams for a period of 7 years.[407] It was soon after the expiration of this lease that the property was purchased by another German immigrant, Christian Hehr, whose family lived there until the late twentieth century.[408] Many Germans, including those who were not from Westgarthtown, such as the Hehr, Koch, Schultz, Bindt, Muller, Lehmann, Unmack and Ludeman families, took advantage of the opportunity to acquire land in nearby Epping and Wollert in this period.[409]

By 1871 the 640 acre Crown Allotment 11, Parish of Wollert, which had been sold in 1853 in four 150-158 acre parcels, had been divided into nine allotments. Seven of these were farms, as well as Henry Ludeman's Harvest Home Inn and wheelwright shop.[410] A number were occupied by German families who had taken up dairying; the Hehrs, like a number of others in the Merri-Darebin dairy district, combined this with commercial hay production, and a draught horse stud. By 1860, dairying had emerged as the main farming activity and remained the mainstay of the district's economy for over a century.[411]

In 1875 Koch, described then as a 'farmer' of 'Wollert', sold his 75 acre property to Carl Louis (Louis) Unmack 'of Sandhurst' a 'miner', for £820.[412] Unmack, a German, had married Caroline, a daughter of Christian Ziebell, the largest of the original Westgarthtown settlers. Louis and Caroline lived first at Bendigo before returning to Epping.[413]

For generations the Unmacks were a part of the fabric of the local farming community. A Doretta Unmack, almost certainly one of the children of Louis and Caroline, was an original pupil of the Wollert State School when it opened in 1877.[414] In 1880 Ada Unmack married Robert Young, and their children, including Fred and Melba, and also their grandchildren, attended the Wollert State School. Fred Young was at one time the neighbour of the Unmacks on the east side.[415] Melba married Nigel Brock, who was likely either the James Nigel Brock or a son of JN Brock who in 1924 obtained possession of 51 acres of the former Young (and Unmack) property, now 80 Harvest Home Road, under the Closer (eventually the Soldier) Settlement Act.[416]

Many of the intense complex of walls on 80 Harvest Home Road were presumably built by its 1860s owner Richard Young,[417] or his children, including Robert or possibly grandson Fred or their granddaughter Melba whose husband JN Brock acquired the smaller 50 acres. The Young, Brock and Unmack families were close relations as well as neighbours. In 1977 James and Melba Brock were living next door, in 'the old Unmack home in Harvest Home Lane'.[418]

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[406] Wuchatsch, 1985, *op cit*, p.31
[407] Search Notes for Torrens Application 54555, Registrar General's Office
[408] Victorian Heritage Inventory H7922-0297
[409] Wuchatsch, 1985, *op cit*, pp.46-47
[410] PROV, VPRS 14601/P/3, Shire of Darebin Ratebooks, 1871-72.
[411] Wuchatsch, 2004, *loc cit*.
[412] PROV, VPRS 560/P/1548 (Torrens Application 54555)
[413] Wuchatsch, 1985, *op cit*, pp.37-38. (Wuchatsch also refers to a Dorothea Unmack, nee Ziebell, pp.116, 141)
[414] Payne, JW, *Centenary History of the Wollert State School No.1861, 1877-1977* (Lowden, Kilmore, 1977), p.11
[415] *ibid*, p.17; PROV, VPRS 560/P/1548 (Torrens Application 54555)
[416] Wollert Parish Plan; PROV, VPRS 560/P/1548 (Torrens Application 54555)
[417] VPRS 14601/P/1, Shire of Epping Ratebooks, 1865
[418] Payne, Wollert State School, *op cit*, p.17

Louis Unmack died in 1917 and his wife Caroline died in 1919. In 1925 their son Otto Carl Christian Unmack, having inherited the 75-acre property, sold it to Magdalena Hehr. Magdalena Hehr was the widow of Jacob Hehr, a son of Christian and Dorothea Hehr, the Unmacks' original neighbours to the north.[419] In 1931 John Albert Hehr, the son of Magdalena who had died in 1928, inherited 'the farm known as Unmacks' from her estate. 'Unmacks farm' was described as the whole of the 75 acres originally purchased by Louis and Caroline in 1875.[420]

'Jack' Hehr married Olive Young, a granddaughter of Louis and Caroline Unmack.[421] In 1956 he entered into a sale of the 75 acre property, on long (ten year) terms, to John and Clarice Evans. Included in the sale were 22 cows, 1 bull, a 4 unit milking plant, 10 milk cans, a chaffcutter, tip dray, a horse and harness, and a milk contract for the supply of 47 gallons.[422] Less than two years later, having increased the number of its milkers to 30, its milking cans to 14, and its milk contract to 56 gallons, the Evanses sold the property to William and Emily Winnell, dairy farmers of Seymour. Again, less than two years later, in 1959, the Winnells sold the property, with its valuable milk contract for the supply of fresh milk to Melbourne, to Simon and Ida Salicki (farmers) and Zeta Ennis, of Caulfield.

By this time John Hehr had died and his widow Olive had inherited the property, in which she still had an interest by virtue of its long sale terms. In 1966 when the property (the whole 75 acres) was leased for three years to Robert and Lorna Dempster, it still had a four bail milking shed, with a Baltic Simplex milking machine. The lessees were to use the property for residential and dairy purposes only, and to maintain the property's existing milk contract of (by now) 50 gallons per day. In 1969 the original c.76 acre allotment was subdivided into four roughly equal blocks, which presumably marked the end of dairying on that site.[423]

The topography was the prime contributor to the complexity of the walls in this area. The 'stony rises' or outcrops of the Merri–Darebin Plains meant it was possible to cultivate crops only on land below the rises where soil had accumulated. If swampy, these alluvial areas were drained, then cleared of basalt floaters that were put to use, together with stone grubbed from outcrops, in stone walls dividing these different land types. Stock were grazed on the mineral rich native grasses of the stony rises, and kept out of paddocks, at least some of which were growing feed-crops for the farms' dairy cattle and working horses.

The result appears to have been this patchwork of small irregular fields, divided by stone walls which more or less traced the outcrops. The complex and irregular patterns of walls are incomparably more historically and visually interesting than the usual straight boundary and paddock walls, which are also intensely and closely built as a result of the small size of many farms in this area.

However these complex internal walls presented problems for farmers. In 1917, a time when the area was booming, partly as a result of the CRB's road improvements, a new 51 acre dairy farm for Fred Young was excised from the original 158 acre W Swan allotment, at 80 Harvest Home Road.[424] The Closer Settlement Board assessor described the property as 'undulating' with 'outcrops of basaltic stone', and 25-30 acres of 'flats' upon which were cultivated hay, beans and maize. It was 'practically impossible to increase the area of cultivable land', said the valuer, 'as the balance is a reef with a heavy outcrop of stone showing at the surface.' The 'stony character of a portion of the area' created 'the disadvantage of having to cultivate irregular shaped areas.' The small property was divided, largely by stone walls, into ten paddocks.[425] Some of these can be seen in satellite images today (Image 122).

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[419] PROV, VPRS 560/P/1548 (Torrens Application 54555)
[420] PROV, VPRS 560/P/1548 (Torrens Application 54555)
[421] Victorian Heritage Inventory H7922-0297
[422] PROV, VPRS 560/P/1548 (Torrens Application 54555)
[423] LP 79646, LP 86637
[424] While the name 'Fred Young' stands out among the German names in this area, in fact Fred was the son of Robert Young and Ada Unmack; Ada Unmack was the daughter of German parents, Carl Unmack, and Caroline Ziebell, one of the original Westgarthtown families. (Payne, JW, Centenary *History of the Wollert State School No.1861, 1877-1977* Lowden, Kilmore, 1977, p.11)
[425] Melbourne Closer Settlement: PROV, VPRS 5714/P/739 (113/12)

There were very many small farmers of German ethnicity in this precinct. Of the six roads in the City of Whittlesea which have been named after German pioneers, two are situated in this precinct: Lehmanns Road and Bindts Road. It is probably not a coincidence that, after Westgarthtown, this precinct was the most closely settled, intensively farmed, and densely walled area in the Merri–Darebin Creek dry stone wall region.

Wollert was also a favourite place for painting excursions by noted landscape artists, including WB McInnes, William Frater, John Borrack, Arnold Shore and Dawson McDonald. The Bridge Inn Road and Bindts Road district (in particular the property *Cheshire Park*), with the 'Wollert Hills' in the background was a preferred location. The open red gum woodlands were the primary subject, with dry stone walls a minor feature.[426]

***Image 123:*** *80 Harvest Home Road: 'stepped' linear cultivation paddock walls at south end of farm, looking towards Harvest Home Road. (David Moloney, 2019)*

[426] Ellem, Lucy Grace (ed), *The Cultural Landscape of the Plenty Valley*, Plenty Valley Papers Volume 1, La Trobe University, 1995, pp.77-87, 130, 132-133, 136-139, 143, 145

*Image 124: 80 Harvest Home Road: at the north end is a regularised or straight cultivation paddock wall, with the stony rise behind. Looking north. (David Moloney, 2019)*

*Image 125: Two largely dry stone-walled paddocks at 240 Bindts Road are partially shaped by stony rises and outcrops. (Google satellite, 2019)*

*Image 126: Further south at 10A Bindts Road is a similar paddock between stony outcrops. The paddocks on both properties are similar in size, shape and setting to those on the Merri Creek. (Google satellite, 2019)*

*Image 127: 100 Bindts Road, settled by Christian & Maria Bindt in the 1850s. Maria Rosel's family had come to the district via Westgarthtown. The period house is behind a dry stone wall that skirts around a small stony outcrop, and is set in an exceptional rural landscape, with red gums adjacent and Quarry Hill behind. The long north-south stony rise on which it is built features numerous dry stone walls along other Bindts Road properties, in good condition on the ridge, but deteriorating where they move off it. (David Moloney, 2019)*

*Image 128: The eastern end of the cultivation paddock at 240 Bindts Road, showing the north-south stony rise which separates it from the Darebin Creek. (David Moloney, 2019)*

*Image 129: The long southern boundary wall of 240 Bindts Road, which is considerably intact in the section viewed between Bindts Road and Darebin Creek. (David Moloney, 2019)*

*Image 130: One of the mostly walled cultivation paddocks and stock yards on the Schultz Pine Grove property on Lehmanns Road, opposite 240 Bindts Road above. Its irregular form has evidently been significantly shaped by stony outcrops. The property has retained many indigenous red gums, which contribute high aesthetic values. (Google satellite, 2019)*

*Image 131: Entrance to Schultz's Pine Grove, Lehmanns Road. (David Moloney, 2019)*

*Image 132: Looking north-east across Pine Grove from Lehmanns Road. (David Moloney, 2019)*

***Images 133, 134:*** *Epping Road walls. Above: reasonably intact section of wall on a stony rise foundation. Below: a conspicuously located and substantial length of wall, with an appropriately distinct, modern rebuilt wall-end. (David Moloney, 2019)*


*Image 135: West side of Epping Road, between Harvest Home Road and Lehmanns Road (c.235 – 255A Epping Road). Roadside wall, with tree hedge in part, and four perpendicular walls within 180 metres demonstrates the intensity of dry stone walls in the Wollert Small Farming precinct. (David Moloney, 2019)*

*Image 136: Sections of Bindts Road constitute an outstanding and rare example of a double dry stone wall road, the best in the City of Whittlesea. This section is photographed looking north east from the historic Schultz property. Indigenous red gums add to the aesthetic value of the walls. (David Moloney 2019)*

***Images 137, 138:*** *Part of the western boundary of 80 Harvest Home Road with the former Unmack family at 90 Harvest Home road, comprises the substantial remains of a rare composite stone, post & rail, post & wire wall, as described in a 1968 survey, and photographed in 2011 (left), and 2019 (right). Robert Wuchatsch remembers many composite walls in the area, but examples with very old heavily mortised posts are now rare. In 1990 Gould (Site 1.25) reported a 'post & rail' fence on the property, which may have been this one. The wide base would suggest that the posts may have been inserted sometime after an original all-stone wall was built, but other evidence, including some massive 'coping' stones suggest that it was originally a purpose-built half-wall. Further investigation of the fabric of the wall is warranted. (David Moloney, 2011, 2019)*

***Image 139:*** *Wall face of part of the remarkable stream diversion retaining wall between Lehmanns and Bridge Inn Road, built by Gottlob Ernst Schultz and his sons. The height of this part rises to 1.3 metres. There is a stone apron under the channel in front; the coping stones are at the level of the ground on the other side of the wall. (David Moloney, 2013)*

***Image 140:*** *Wall face of part of the remarkable stream diversion retaining wall between Lehmanns and Bridge Inn Road, built by Gottlob Ernst Schultz and his sons. The height of this part rises to 1.3 metres. There is a stone apron under the channel in front; the coping stones are at the level of the ground on the other side of the wall. (David Moloney, 2013)*

***Images 141, 142:*** *Now demolished walls on Hehr's property have reduced the integrity of Gould's Harvest Home Lane precinct. Above: organic serpentine wall prominently sited near corner of Epping and Lehmanns Road. Below: the high horse yard, once a landmark on Epping Road. (David Moloney, 2009)*

## Statement of Significance: 'The Wollert Small Farming Precinct'

*What is Significant?*

Wollert was a noted early nineteenth and early twentieth century centre of dairying, particularly in providing fresh, or whole, milk to Melbourne. Farms in the Epping–Wollert area were small, tailored to a profitable niche industry, and intensively developed.

The precinct extends from Epping Road (both sides) between Harvest Home Road to halfway between Lehmanns Road and Bridge Inn Road, and to the east side of Bindts Road from Harvest Home Road to halfway between Lehmanns Road and Bridge Inn Road. It includes the notable Schultz-built stream diversion wall on the Hanson Quarry site on the south side of Bridge Inn Road.

The precinct includes road boundary walls, including increasingly scarce examples of roads walled on both sides (Epping Road and Bindts Road), and property boundary walls, many of which are publicly visible. Most significantly, it includes intensively developed complexes of internal walls, characteristically associated with cultivation paddocks. It also includes some dry stone retaining and stream diversion walls on Lehmanns and Bridge Inn Road. There is also a fine dry stone walled and pine-planted entrance driveway to *Pine Grove* on Lehmanns Road. It includes composite stone and post & wire fences as well as all-stone walls.

Although the Wollert Small Farming precinct has been significantly impacted by the urban redevelopment of about half of its properties and significant walls, the remaining portion, which retains important individual walls and landscapes, and still preserves the heritage integrity of the precinct. An important wall around a stony rise near the former Hehr dwelling has been preserved. Parts of properties on Bindts and Lehmanns roads also remain undeveloped, with irregular walled cultivation paddocks, and walls built along the stony rise between Bindts Road and the Darebin Creek, by German settlers and others.

*How is it Significant?*

The Wollert Small Farming dry stone walls are of historical, aesthetic, and scientific significance to Victoria, and of social significance to the City of Whittlesea.

*Why is it Significant?*

The dry stone walls in the Wollert Small Farming precinct express the natural history of the area, and the cultural history of its human modification. They are particularly associated with the history, function, and materials of the distinctive stony rises landscape.

The Wollert Small Farming precinct is ***historically*** significant to Victoria. (Criteria A, B, D) Its dry stone walls constitute outstanding and unique evidence of the 1850s watershed in Victoria's history: the major turn in government land policy towards selling farms in small and affordable parcels so as to be able to feed the gold-rush population. The precinct began with Crown allotments of some 150 acres, some of which were divided into smaller allotments of 50 – 75 acres. it provided opportunity for aspiring small farmers, and contributed substantially to the supply of fresh milk and butter to Melbourne and to the development of the municipality.

Despite recent suburbanisation, the precinct is still, as described in the 1990 Heritage Study, the densest aggregation of dry stone walls in the City of Whittlesea and on the metropolitan fringe, and a rare 'European rural' cultural landscape. Small dairy farms generated the greatest number, the highest intensity, and the most distinctive dry stone walls in Whittlesea. Some walls or sections within the precinct are of high aesthetic value. While the condition and integrity of the walls varies, together they contribute to a visual and historical cohesion and sense of place in the Wollert district.

The precinct is a unique expression of dry stone walling and small farming in the Melbourne area. The intensity and irregularity of its walling appear to be notable at the state level. The small size of the farms increased the number of boundary dry stone walls. Within the farms, the limited land for growing feed-crops was compounded by the extensive stony rises. Specialised whole-milk production on small farms required every part of the small properties to be used efficiently, resulting in a high number of small paddocks mostly enclosed by dry stone walls. The internal walls followed the contours of the stony rises or outcrops, or were regularised into short linear steps, maximising the land available for cropping on the rich black alluvium, and grazing on the mineral rich 'sweet' grasses of the stony rises.

These post-1853 walls maintained and extended the 1840s practise in the Merri–Darebin Plains of organically shaped walls partitioning arable land with walls responding to the micro-relief of the landscape. The creation of cultivation paddocks to keep stock out rather than in, resulted in particularly intricate networks of walls. These organic or irregular walls are distinct from, and incomparably more aesthetically and historically interesting than the great majority of dry stone walls in Victoria whose plans conform to the cardinal points of the government survey. Remaining examples here are an exceptional feature of the City of Whittlesea's heritage, and are unique in the volcanic districts of Melbourne.

The most significant, and last remaining, example of complex dry stone walls in the Wollert Small Farming precinct, and of note at the state level, at 80 Harvest Home Road, appears to remain intact, although as usual the walls are unmaintained and in different condition. This property is also rare in possessing historical documentation about the challenges of small paddock farming on the stony rises, which complements the fabric on-site. It is further enhanced by the retention of its bluestone farmstead and a bluestone milking shed on the road boundary; this prominence significantly contributes to the diminishing 'European' character of the precinct.

The Wollert Small Farming precinct is ***scientifically*** significant to Victoria for its potential to yield information regarding dry stone wall construction on the stony rises, and nineteenth century small farming in the Melbourne stony rises dairy district. It has unique potential to educate regarding the stony rises volcanic landscape between the Merri and Darebin Creeks, early farming practises in Victoria, composite dry stone wall construction, and specialist facets of the Victorian dairy industry. (Criterion C)

The Wollert Small Farming precinct is ***aesthetically*** significant to Victoria for the exceedingly complex and intense patterns of its dry stone walls. (Criteria E, F) It is also of aesthetic significance for its remnant indigenous red gums, particularly in the Bindts Lane part of this precinct. At times, together with the 'Wollert Hills' (or 'Wollert-Mernda Hills') these were the subject of mid twentieth century landscape artists. The areas of native wooded landscape, and the gently undulating terrain and the backdrop of Quarry Hills, distinguish and greatly enhance the aesthetic value of the walls with which they are associated.

The Wollert Small Farming precinct is ***socially*** significant to Victoria. (Criterion G) Its dry stone walls demonstrate enterprise and creativity in building dry stone walls, including of the German community, who built many of the extant examples in the precinct. Several stream-diversion or drain walls on the Schultz properties between Lehmanns and Bridge Inn Roads are rare if not unique in Victoria. The local German community made significant contributions to the dairy industry, and to the Whittlesea community. Residents of German ethnicity retain strong associations for the precinct, much of which was built by their forebears. The German presence in this precinct is highlighted in the names of two of its roads: Lehmanns Road and Bindts Road. (Criteria F, G)

# Chapter Seven (Precinct No.4)

## 'Woodstock Mixed Farming & Horse Stud Precinct'

### Introduction

The 320 acre Crown allotments sold along Donnybrook Road in the Parish of Yan Yean in 1853 were twice the size of most allotments sold by the Crown in the Parish of Wollert historical 'Small Farming' precinct. On these were developed mixed farms supporting large families, and also horse studs, and the kennels and associated facilities of the Findon Harriers Hunt Club.

Although by the end of the nineteenth century the farms appear to have been at least three times the size of those in the 'Small Farming' precinct to its south, at the state level they were only average sized 'mixed' farms. Crucially however, in terms of dry stone walls, they were principally dairy farms, as 'sheep are not adopted by the farmers'.[427] The product here was butter rather than fresh milk, but as in Epping-Wollert cultivation paddocks, shaped by the stony rises landscape, were required for feed crops for milch cows and farm working horses.

The landscape of this area has long been recognised as distinct. An 1890 map marks the land to the west of the precinct as 'Open Plains'.[428] An 1883 report noted of Woodstock that 'the country to the south and west is very level'.[429] While Woodstock itself, continued the 1883 report, was:

> 'on the extreme verge of the Keilor Plains, and retaining the most prominent characteristics of the plains, being level and in many places stony, it is however timbered, red and white gum and sheoak being the kinds indigenous to the locality.'[430]

An early local historian JW Payne refers several times to the area's 'stone walls and leaning red gums'.[431] Westgarthtown and Plenty Valley historian John Borrack also refers to 'the rhythmic ballet of red gums on the basalt plains'.[432] The outstanding natural landscape greatly enhances the aesthetic, and historical, values of this historical dry stone wall precinct.

The key characteristics of the area are its larger dairy farms, and open red gum woodland. Some of the dry stone walls, especially on property boundaries, and particularly its irregular cultivation paddocks, are structurally prepossessing and intact. In places the walled cultivation paddocks are immediately adjacent to stony outcrops of high relief, and mature red gums. Others are set around lower stony outcrops, but in parklike remnant open red gum woodlands. The walls both complement and are enhanced by these landscape settings, and contribute greatly to the aesthetic values of the precinct.

The western extent of the precinct is generally the boundary of the 'Open Plains' area, which is just west of the original *Woodstock* Farm, about two kilometres west of the Woodstock junction, and marked by red gum woodlands on the south side of Donnybrook Road. The eastern extent is *Fenwick Stud*. The precinct extends generally between Donnybrook Road in the north and Masons Road in the south-east, and Boundary Road in the south-west. An exception is the proposed inclusion of the former Goss property on the north side of Donnybrook Road (No.1145), a bare area which is really part of the 'open plains'; but whereas predominantly properties in that area were for sheep, this was a major dairy farm, a fact still testified to by its dry stone wall cultivation paddock; it also features dry stone walls along Donnybrook Road.

(Bernard Goss was also a noted member of the Woodstock community. The property also includes the major eruption point of Hayes Hill.)

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[427] *The Weekly Times*, 9th February 1884, p.1
[428] Shire Map Series, Kal Kallo, 1890
[429] *The Leader*, 9th June 1883, p.10
[430] *The Leader*, 9th June 1883, p.10
[431] Payne, 1975, *op cit*. p.112
[432] Ellem, 1995, *op cit*, pp.82, 139

The precinct includes the Medland Estate, whose history is a little different to the rest of the precinct and so is considered separately here. While being launched as a small farming precinct, the properties of Medland were gradually consolidated, as distance from Melbourne dictated that dairying for butter production rather than the more lucrative supply of fresh milk, was viable in this area. This made very small properties less viable. The Medland Estate features the butter production, and the same open red gum woodland of Woodstock; some early reports describe it as being in 'Woodstock'.

The precinct includes boundary walls, including a few which appear in an 1857 map along and intersecting with Epping Road. Being of straight alignment, property boundary walls that pass straight over stony rises can be highly intact and visually impressive.

The historic quarry between Epping, Masons and Bridge Inn roads has obliterated part of the precinct as it has grown, but otherwise the integrity of the precinct is high. A rural residential subdivision along Donnybrook Road has not destroyed a long dry stone wall at the rear of the properties. The Wilkes Court rural residential subdivision off Masons Road has not affected walls shown on early twentieth century plans. Similarly, Andrews Road rural residential subdivision off Boundary Road appears to have had minimal impact on walls in that area. However the 'drystone walls of excellent quality' identified on Donnybrook Road by Gould in 1990 do not appear to survive.[433]

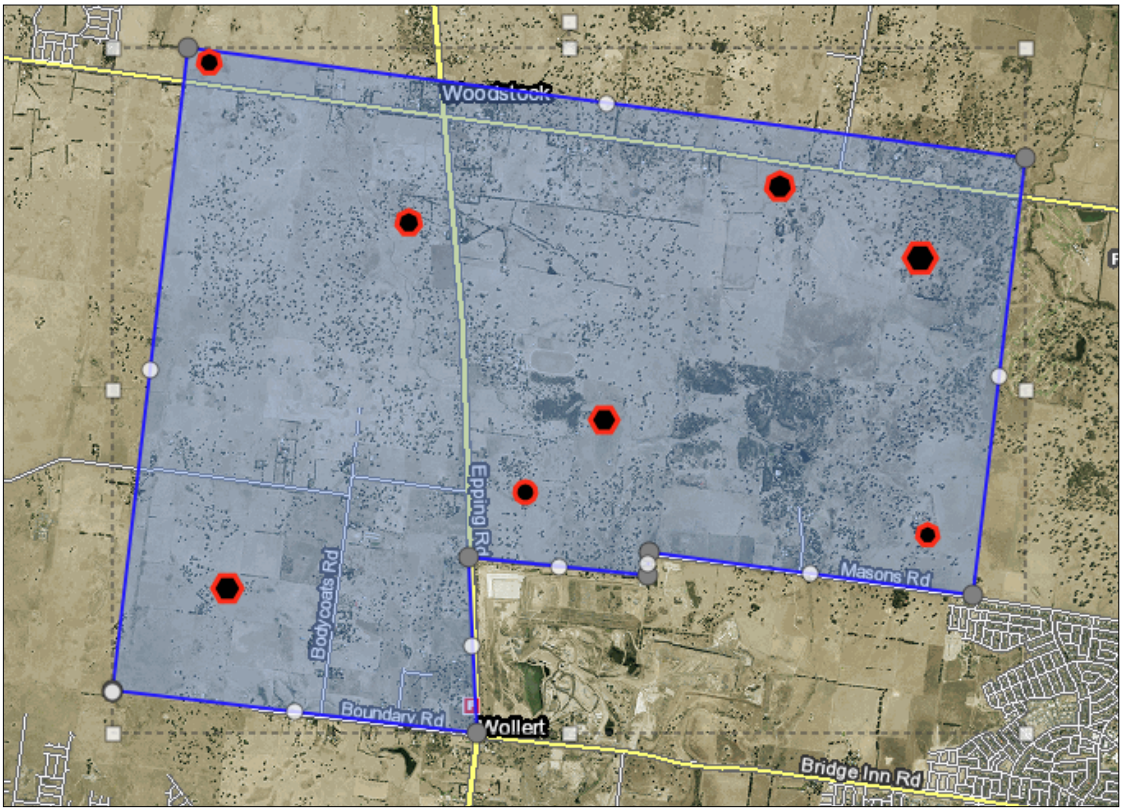


***Image 143:*** *Purple Shading: 'Woodstock Mixed Farming & Horse Stud Precinct' (Indicative).*
*Red & Black Polygons: properties with dry stone walls separating stony outcrops from cultivation paddocks (larger ones with larger or multiple cultivation paddocks)*

[433] Gould, City of Whittlesea Heritage Study, 1990, Site 6.05 'Drystone wall, Donnybrook Road'

## History

*Early Farming*

At the 1840 Crown sale of the Parish of Kalkallo virtually all that part in the present day City of Whittlesea was purchased by grazier John Hunter Patterson. Quickly realising he couldn't repay his loan, he advertised 15,000 acres of this land for sale, which was apparently all purchased by another ambitious pastoralist, William Forlonge. Forlonge had also overstretched his finances, and needing to stay foreclosure, sold the southern part of his vast Parish of Kalkallo estate to Charles and Richard Wedge in 1843. He was forced to sell the rest of his land in this area in 1853.

By far the largest buyers around the Woodstock crossroads (the corner of Epping and Donnybrook roads) in 1853 were the Whitty family. John purchased the square mile north-west from the corner, James purchased a similar acreage on the south-west corner, and Patrick purchased the same area again on the south east corner, as well, in partnership with a Michael Larkin, he also purchased over a thousand acres north towards Grants Lane. Epping Road at this stage was a teamsters route to the Castlemaine and Bendigo goldfields, as well as a stock route of northern pastoralists to the Melbourne markets. At the Donnybrook Road crossroads members of the Whitty family (presumably brothers) built the grand two-storey Sir Henry Barkly hotel, a two-storey post office and store on the opposite corner, and donated land for a Catholic church.[434]

The new freehold farmers of the area established a Woodstock Roads Board in 1858. The area had a peak population of 700 in 1863, but as occurred everywhere in the farming regions of Port Phillip in the early sixties this figure dwindled rapidly, to 500 by 1867. By 1870 the area had been almost completely repopulated, as the Whitty family and others had sold their properties to new owners. The high proportion of Irish settlers in the district supported a Catholic school, and in 1874 the parents of over 70 children also petitioned for a public school.

On the south west corner of the Woodstock crossroads (Epping and Donnybrook roads), the *Woodstock* property appears to retain some partly dry stone walled cultivation and stock enclosures. The 1895 homestead on the property was noted in the 1991 Whittlesea heritage study as *Linton Park*.

The property of 579 acres was purchased with a mortgage by James Whitty in 1853. Whitty had been an illiterate Irish labourer when with three other Whitty men he came to Melbourne as a bounty passenger in 1840. He took up farming between Woodstock and 'Darebin Vale',[435] presumably as a tenant farmer.

In 1853 he described his occupation simply, and presumably proudly, as 'yeoman'.[436] To be a yeoman – a small freehold farmer of some substance – was the goal of most of the landless migrants who were then arriving in Australia. Creation of a 'sturdy yeomanry' was also the idyll of democratic land reformers. Whitty may have been a Wakefieldian success story. In 1866 when he sold the property, he described himself as 'James Whitty of Myrhu [sic] near Wangaratta'.[437] It seems the whole Whitty clan had moved to this area from Woodstock some time before this; a descendent of James said it was because he felt 'hemmed in' by the small farms around them.

In January 1877 James Whitty purchased the 12,000 acre Myrrhee Station, on the King River near Moyhu, assuming the seat of the run developed by famous squatting families the Dockers and Clarkes. Having been established in the area before 1866, he had already accumulated a pastoral empire which included the joint rental of 12,000 acres of Union Bank land.[438] He had progressed from labourer, to tenant farmer, to yeoman, to squatter.

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[434] Payne, 1975, *op cit*. p.107; 'Dairying at Wollert. Milk for the City: A Profitable Industry', *Weekly Times*, 14th May 1921, p.9
[435] Jones, Ian, *Ned Kelly, A Short Life*, Lothian, Port Melbourne, 1993, pp.12, 94.
[436] PROV, VPRS 460/P0/898, TA 10575
[437] *ibid*
[438] Jones, *op cit*, pp.15, 94

It was his status as a pastoralist and an alleged anti-small farmer incident that led to Whitty becoming Ned Kelly's avowed enemy. Kelly had been offended by accusations from within the Whitty clan that he had stolen a bull from James. Later, apparently in deliberate revenge for this slur and other run-ins, Kelly and others perpetrated 'the Whitty larceny', stealing some dozen horses from James. Later, in the 'Cameron letter', in which he attempted to explain why he had become an outlaw, Kelly, 'almost obsessed' with Whitty, further accused him of injustice to 'the poor man of the district', whose stock, he alleged, the Whitty clan had impounded in a time of drought.[439]

There is no evidence of such disagreeability by Whitty during his time at Woodstock. Storekeeper Owen Quinn later testified that when he arrived in 1856 there had been a dam or waterhole on James Whitty's property *Woodstock*, 'used by the neighbours for the purpose of watering stock'.[440] Very unusually, this neighbourly action appears to have been voluntarily legalised in an early 1850s property contract wherein James and neighbour Patrick McCoy delineated the shared boundary of their land as public road access to the dam. The dam was situated across the Darebin Creek near a place where there remains a narrow gap between two stony rises; it was washed away in 1859. The existence of such substantial discretionary farm infrastructure so soon after Whitty purchased the property suggests the possibility that it pre-existed, built by tenant farmers, perhaps as a communal resource. Given their dominance of purchases in this area when it was put up for sale in 1853, these might have included the Whitty family, of 'Darebein Vale'.

*Horse Studs, Woodstock Races and Findon Harriers*

In 1866 Whitty sold *Woodstock* to the Langfords of nearby Somerton, and in 1868 they issued the first of two recorded three year leases to Robert J Hunter, 'gentleman'. In 1877 Hunter gave his occupation as 'horse breeder'.[441] In 1874 a turf reporter noted two of Hunter's venerable bloodmares and the names of other mares and sires familiar to racegoers, as well as a crop of 'aristocratic youngsters'.[442] Hunter's *Woodstock Stud* operated 1868-1879.[443]

It is not unlikely that the property had been used earlier, by Whitty, for that same purpose. James has been described as a 'lover of horseflesh', a trait obviously shared in his family; he and at least two other Whitty men were recorded as Clerks of Course and Stewards for a race meeting at Moyhu in 1877.[444]

During James Whitty's occupation *Woodstock* had been fenced with post & rail, a material at hand in the red gum woodland, and a customary fencing for horses. An 1857 road map shows that the Whitty properties were the only ones comprehensively fenced; in fact Epping Road fencing only commenced at James Whitty's property.[445] There are a few sections of stone wall marked elsewhere, but Whitty's property fences are marked differently, and extend completely around his road boundaries; this fencing is almost certainly post & rail. When Hunter occupied *Woodstock*, his 1868 lease permitted the destruction of trees on the property only 'to cut and fell all such trees as may be grubbed up by the roots … for the erection or reparation of fences thereupon.'[446] Again, this is almost certainly a reference to post & rail fencing built by James Whitty.

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[439] Jones, *op cit*, pp.95, 145
[440] Statutory Declaration, Owen Quinn, 28th September 1877 (PROV, VPRS 460/P0/898, TA 10575)
[441] Payne, 1975, *op cit*, p.107, Various contracts, PROV, VPRS 460/P0/898, TA 10575;
[442] Australasian, 2nd May 1874
[443] Robert Wuchatsch, 'Racing and Breeding in the City of Whittlesea': https://wikinorthia.net.au/racing-andbreeding- in-the-city-of-whittlesea
[444] Jones, *op cit*, pp.86-87
[445] PROV, 'New Roads 122', 1857
[446] PROV, VPRS 460/P0/898, TA 10575

*Bournefield Stud* was established on Masons Road in either 1855 or 1856, as gold-rush-era Melbourne became the hub of Australian racing. The partners were Hector Norman Simson, an established thoroughbred breeder, and Edward Row, of E Row & Co, the Bourke Street stock, horse, wool etc auctioneer.[447] Both were committee members of the Victorian Jockey Club.[448]

In 1853 Simson had asked his friend WC Yuille, Melbourne's famous horse identity, to purchase a stallion for him while visiting England. His purchase, Warhawk, sired many major race winners with the *Bournefield* blood mare Wilhelmina, 'decidedly the best of Australian dams'.[449] In 1859 the most famous of their offspring, Flying Buck, won 3577 pounds, the most prizemoney ever won in Australia in a season. At the 1859 inaugural Australian Champion Sweepstakes, the 'first great champion meeting of the Australian colonies', where 30,000-40,000 people watched Flying Buck win by ten lengths.[450] This was the first race in which five colonies had entrants, and the first sporting result to be reported between Melbourne and Sydney by the electric telegraph. The race also sparked interest in the establishment of an annual handicap capable of attracting a quality inter-colonial field, which occurred two years later with first Melbourne Cup, held in front of a crowd of 4,000 people.

The fame of *Bournefield Stud* was cemented. By 1860 it was described as being 'in the very first line of colonial breeding establishments.'[451] The stud was commended for its 'neatness and regularity'.[452] The 'system pursued by the *Bournefield Stud*' was widely admired: it was 'the first regularly organised in the colony for breeding thoroughbreds for annual sale, after the pattern of the greatest and most valuable studs in England.'[453]

The dissolution of the partnership and piecemeal sale of *Bournefield Stud* in 1864 disappointed the racing industry. It was frequently compared with the similar break up of Sir Tatton Sykes' famous *Sledmere Stud* in England. The 'eminent firm of Simson and Row' was described as the 'Australian Sir Tatton'.[454]

In 1860 *Bournefield Stud* had been the venue for the inaugural Woodstock Races.[455] Prior to the race Row entertained what seems to have been the pride of Melbourne's racing set: 'What a number of familiar faces one meets there: legal, banking, mercantile and sporting acquaintances', reported the *Argus*, pointedly declining to relate the banter of the convivial if not raffish gathering. A wagon was transformed into a grandstand, the attendance was 'numerous', and the racing successful, if not remarkable, except for the 'horsemanship' and 'brave victory' of Miss Carroll in the Ladies Race despite her horse being one of those to jump off in the wrong direction, and her later being thrown off.[456]

The property was sold in 1864 to Canadian George Deihl McCormick, who, with Mr Newcomen, for ten years defied expert views that the local population was too small to sustain a race meeting. The last reported Woodstock Races, in 1874, postponed twice due to weather, attracted a good crowd, said to have been from 300-400 to over 700 strong.[457]

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[447] *Cornwall Chronicle,* 16th November 1859; etc.
[448] *Age,* 15th December 1856
[449] *Argus,* 12th March 1860
[450] *South Australian Weekly Chronicle,* 15th October 1859; *Bells Life in Victoria and Sporting Chronicle,* 3rd February 1866; *Australian Heitage Database National Heritage List: 'Flemington Racecourse Assessment Report'*: https://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=105922
[451] *Argus,* 12th March 1860
[452] *Bell's Life in Victoria and Sporting Chronicle,* 17th March 1860
[453] *South Australian Weekly Chronicle,* 15th October 1859; *Bendigo Advertiser,* 31st December 1863.
[454] *Argus,* 16th May 1864; Melbourne Punch, 2nd June 1864; *Bendigo Advertiser,* 31st December 1863.
[455] John Whitty was one of the stewards (*Bell's Life in Victoria and Sporting Chronicle,* 3rd March 1860)
[456] *Argus,* 12th March 1860; *Bell's Life in Victoria and Sporting Chronicle,* 17th March 1860
[457] *Australasian,* 2nd May 1874; *Age,* 27th April 1874;

The advantages of Woodstock for racing, as well as nurturing bloodmares and thoroughbred foals, were regularly commented upon. The Woodstock racetrack was 'situated in a sort of wooded park,'[458] whose 'black loam' soil provided a 'very rich' turf'.[459] The Woodstock Racecourse 'is really a very good one; indeed it would be difficult to find better turf ...'.[460]

Dry stone walls were a part of this story from the first. At the first Woodstock races it had been thought that a steeplechase might be included in future, 'as the fences (stone walls) are so plentiful.'[461] One reporter had previously noticed that those parts of the farm with more stone seemed to be 'the very best land', but that to overcome this 'slight deficiency', the proprietors were clearing this surface stone and erecting walls with it, 'regardless of the immediate outlay'.[462] The 1864 advertisement for the sale of the 440 acre property was 'securely fenced and subdivided into paddocks chiefly with stone walls.'[463]

Another horse stud, at the opposite end of this precinct, is the well-known *Fenwick Stud*, on Donnybrook Road. Its walls are regarded as the best in the municipality, and are recognised as outstanding by dry stone wall enthusiasts.[464] Gould assessed them as equal to walls in the Western District and Kyneton areas, and of state significance. The property, she said, also 'contains some of the best river red gum stands in the City of Whittlesea.'[465]

Originally named *Carsaig*, this was one of the 320 acre Yan Yean Parish farm allotments sold by the Crown along Donnybrook Road in 1853. Described by Gould as having been a dairy farm, it was likely a mixed farm when occupied by John Horner ('of Yan Yean, farmer') in 1866.[466] Gould concludes that these walls, unlike those of the small dairy farmers of Westgarthtown and the Harvest Home Road precinct, were professionally built. Her arguments, the availability of professional walling skills, and the quality of the walls, are persuasive, although not all walls appear to be of the same quality. While the tradition is that John Horner with a boy and a horse 'built many of the stone walls dividing the property', the present owner believes this improbable, and more likely that the two helped by gathering the stone for wallers.[467] It would seem plausible however, or at least conceivable, that at least some walls were actually constructed by or with the help of the owner. The fabric of the farm as described by Gould suggests that the dairy farm was principally for butter, rather than fresh milk, production.

Samuel Gibson, of the Foy & Gibson stores family, purchased the property in 1903, which he renamed *Fenwick*. He operated a Clydesdale stud there until 1916, when his daughters established a Corriedale sheep stud. In 1924 daughter Dora Maclean established her nationally distinguished Arabian and Shetland horse stud.[468]

There were other horse studs in the area. Numerous larger farmers went in for breeding draught horses, some for their own purposes, and some commercially. Bernard Goss, on the large dairy farm *Mimosa Park* on Donnybrook Road (which milked up to 300 cows daily) was one of these.[469]

The Findon Harriers Hunt Club was formed by Edward Miller of Mill Park in 1872. Its events, such as those held at Rupertswood in Sunbury, and the race meetings it organised at city racecourses (notably Moonee Valley) were high society and top hat affairs. It also had a strong membership of Woodstock farmers; by the early twentieth century it conducted point-to-point meetings at many properties in the City of Whittlesea. In the winter months of the 1920s to 1940s newspapers carried photographs of mounted Harriers massed, perhaps on Woodstock Road, at the start of a hunt, all turned out in riding hats and coats, hound pack at heel.

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[458] *Argus,* 12th March 1860
[459] *Bell's Life in Victoria and Sporting Chronicle,* 11th December 1858
[460] *Leader,* 29th May 1869
[461] *Argus,* 12th March 1860
[462] *Bell's Life in Victoria and Sporting Chronicle,* 11th December 1858
[463] *Argus,* 9th June 1864
[464] The Dry Stone Wall Association of Australia visited the property in 2002
[465] Gould, 1990, 'Fenwick Stud', Site 13.07
[466] PROV, VPRS 460/P/2541, TA 24672
[467] Gould, 1990, 'Fenwick Stud', Site 13.07; Personal conversation, Marshall Maclean, *Fenwick,* 25th June 2019
[468] Heather B. Ronald, 'Maclean, Dora (1892–1978)', *Australian Dictionary of Biography,* Vol.15, MUP, 2000
[469] Gould, 1990, 'Mimosa Park', Site 6.06; 'Goss Farm Heritage', Graeme Butler, p.21: https://issuu.com/graemebutler21/docs/little_bald_hill__donnybrook_rd__wo

***Image 144:*** *Riders clearing a stone wall and rail in 1938.*[470]

In 1930 the Master Hubert Miller was killed in a fall at Woodstock while leading the Findon Harriers in a hunt.[471] The club had already been erecting panels on dry stone walls around the district to make jumping easier and safer.[472] One survived on O'Herns Road until recent years.

***Image 145:*** *Summerhill Road: surviving Hunt Club jump panels? (David Moloney 2019)*

The Mason family of *Mason Park*, south of *Fenwick Stud*, were enthusiastic members and office holders, as were their neighbours the Jeffrey family next door at *Rockbank*. Other local Woodstock farming identities on the local committee of the club in 1920 were Tuttle, McCormack and Cotchin.[473] In 1957 Noel Mason, who had been Master of the Findon Harriers since 1941, and was well-known in Melbourne hunting and riding circles, purchased the famous 4000 acre *Warlaby* racehorse stud at Oaklands Junction; this was still in the Mason family in 1998.[474] In 1947 Joseph Mason's 60-year membership was recognised by the club.

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[470] *Australasian,* 18th June 1938
[471] Robert Wuchatsch, 'Findon Harriers Hunt Club', in Wikinorthia: https://wikinorthia.net.au/findon-harriershunt-club/
[472] Eg *Australasian*: 18th June 1927; 12th July 1930
[473] Payne, 1975, pp.184-5; Gould, 1990, Site 5.15 'Mason Park, Masons Lane'.
[474] PROV VPRS 460/P1/1465, TA 53473; David Moloney and Vicki Johnson, 'City of Hume Heritage Study: Former Shire of Bulla District, 1998', *'Warlaby'*, Site BB/19.

While the Findon hunts ranged widely across the City of Whittlesea, between 1926 to 1939 the club used the facilities, including the training track, at *Bournefield Park* in Woodstock. In 1939 the Club purchased *Ashley Hill* also at Woodstock, and constructed kennels; stables were added in 1948. *Bournefield Park* buildings were later moved to the new point-to-point course on Joseph Mason's adjoining property.[475] All of these properties are within this precinct.

*Farming in the Nineteenth and Early Twentieth Centuries*

While this fine landscape, level to gently undulating with open red gum woodlands amongst stone rises, attracted horse studs and horse-lovers, for most life was plain and hard. 'Mixed farming' – 'milking, cropping and carting firewood to Melbourne' – was the rule, and for the large families in the district life could be difficult.[476] Farm vegetables and rabbits sustained many families through difficult times into the early twentieth century.

During the 1860s and 70s the dichotomous system of agriculture in which grazing and cropping were kept rigidly separate, began to be replaced with the 'mixed farm', in which stock and cultivation were rotated, the manure helping to replenish the cultivable land.[477] This transition was sometimes associated with the amalgamation of smaller farms, and sowing of pastures. Peel describes this as a transition to diversified, 'harmonious' and 'stabilised' rural production.[478]

An 1883 newspaper reporter visiting Woodstock noted that 'most of the farms are devoted chiefly to milk production, the only cropping done on these places being with a view to supplying the wants of the milching cows.' He noted a local variation to Peel's observations regarding the sowing of exotic pastures:

> 'The whole district may be described as generally more suited to for grazing than for cultivation. The soil is principally of a very stiff clayey description, being either a rich black or a poorer kind of a grey colour, but in all cases difficult to work. In its natural state it grows a splendid sward of herbage in which kangaroo grass predominates, and as considerable portions of the locality are rendered unfit for cultivation by the presence of stone, this useful native grass holds its own very well.'[479]

A later report suggests that the use of the land for dairying was instrumental in preserving native flora:

> 'Kangaroo grass abounds amongst the native pastures, and as sheep are not adopted by the farmers, this grass predominates in the unbroken fields.'[480]

One farmer in fact credited the success of his butter to these 'sweet and succulent pastures.'[481]

At the same time as battling farmers were using red gum for fencing and cutting it for city firewood, the use of the land for dairying was also contributing to its preservation. While conventional wisdom was that exotic sown pastures greatly increased the productivity of the land, the practise on much of the Merri-Darebin Plains was different. Joseph Cotchin's 490 acre farm on the east side of Epping Road was noted to be:

> 'almost in its natural state, being excellent grazing land, and paying better as it is than if the timber on all portions, and the stones which crop up on some parts, were cleared away for the plough.'[482]

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[475] Payne, 1975, pp.183-189
[476] Payne, 1975, pp.90-91, 108-111
[477] Peel, *op cit,* pp.106-107
[478] Peel, *op cit,* pp.83, 106-7, 110, 125.
[479] *The Leader,* 9th June 1883
[480] *The Leader,* 16th June 1883
[481] *ibid*
[482] *The Leader,* 9th June 1883

On Thomas Bodycoat's *Spring Park* the reporter provides an important description of the Merri-Darebin Plains stony rises landscape 'in its natural state'. It:

> 'must originally have presented a very uninviting appearance, as where there is no stone the land seems to have been low lying, wet and full of tussocks. However careful tillage and surface drainage soon did away with both the tussocks and the wet.'[483]

Dry stone walls were integral to the taming of this challenging landscape. Care was taken to neatly shape dry stone walls around the stony rises of *Spring Farm*:

> 'It is subdivided by post and rail fences and stone walls into 13 paddocks from 1 to 70 acres, the owner in enclosing them having to exercise some judgement and ingenuity in forming a neatly shaped paddock without taking in the patches of basalt which abound.'[484]

Nearby, William Bodycoat's father's *Langton Lodge* farm preserves and demonstrates this careful shaping of walls around stony rises.

The majority of the farms described consisted of stony rises, and perhaps associated marshy land. The 422-acre *Spring Hill* had only some 150 acres 'fit for the plough', while Cotchin rarely cropped more than 80 of his 490 acre farm.

Dairying then, sometimes in conjunction with hay and breeding, had become:

> 'the mainstay of the district, through the land producing naturally a fine sward of grass, and being at the same time expensive to clear and difficult to cultivate. Most of the settlers have recognised this fact and a number of cows are milked, and butter is made on nearly all the surrounding farms, the produce being conveyed to the metropolis regularly every week.'[485]

The good rainfall and the 'rich dark volcanic soil' in parts of the district had seen some paddocks have crop after crop taken off, apparently without any prospect of exhausting its fertility.[486] Crops grown in the Woodstock cultivation paddocks were oats (principally) and wheat, usually cut for hay but sometimes also for grain, in both cases virtually all for home consumption. These were rotated with peas, which helped replenish the soil, and fattened milch cows, and young horses and pigs. On smaller paddocks, of around 2 to 4 acres, were grown mangel wurzel, maize and mangolds.

Unlike the small farmers closer to Melbourne at Wollert, Epping and Westgarthtown who provided fresh milk to the metropolis, the Woodstock dairy farmers were producing butter, or supplying cream to butter manufacturers, rather than supplying fresh milk.

Butter did not need to be transported to market daily, so distance and transport were the keys to which type of dairy farming was carried on. While the North East Railway was accessible from Donnybrook, it was 'more convenient to come by road' said an 1883 report.[487]

Improvements in rail transport nevertheless eventually had an impact at, or perhaps beyond, the eastern and western extremities of Woodstock. The opening of the North East Railway in 1872 did prompt some larger scale dairies in that area to convert from the traditional butter and pigs, and perhaps cheese, to supplying whole milk to Melbourne.[488]

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[483] *ibid*
[484] *ibid*
[485] *ibid*
[486] *Weekly Times,* 14th May 192
[487] *The Leader,* 9th June 1883
[488] Payne, 1975, pp.53-54

From 1891–1918 Wyndham Baker (perhaps son of the Thomastown-Campbellfield dairy colossus Thomas Harrison Baker) operated a 2.3 acre dairy at 1030 Donnybrook Road which, in 1911, was described as probably the largest of its kind in Victoria. Situated just 2 kilometres from the Donnybrook station enabled it to produce wholesale milk for the Melbourne market rather than butter as elsewhere in Woodstock. The site retains dry stone walls thought to date to earlier sheep grazing, and some built by Baker. Its surviving twin gable, 104 bale, bluestone floor milking shed would appear to be a very rare example in Victoria of this large 'shed' style, which preceded the legislated redesign of sheds to accommodate milking machines in the 1920s.

Also beyond the Woodstock dry stone wall precinct, but at the other end of Donnybrook Road, properties such as *Alanbank* near Barbers Creek continued supplying cream to a butter factory.[489] When the Whittlesea railway opened in 1889 it seems to have had a similar limited impact as had the North East railway on a few larger or more specialised dairy enterprises situated close by. For example, in 1938 RR Kerr's *Burnside* dairy, established in 1922 on the corner of Plenty Road and Donnybrook Road, secured a contract to supply fresh milk to metropolitan hospitals, conditional on construction of a special plant to brine-cool and pasteurise milk.[490]

In the 1880s fresh milk dairy farming took place from 10 to 15 miles from the city, the northernmost boundary of which was between Harvest Home Road and Lehmanns Road.[491] Beyond this, in Woodstock, it was the common understanding that dairy farms made butter.[492]

Certainly, butter was produced on the Bodycoat and Cotchin farms, on Epping Road between Wollert and Woodstock. Also, the Whittlesea Heritage Study occasionally remarks on the presence of pigs on farms in this area, signifying the separation of butter milk, which also provided skim-milk for pigs. The Jeffrey *Rockbank* farm, immediately south of *Fenwick*, is reported to have supplied butter to Foy & Gibson stores in the early twentieth century.[493] Ernst Schultz on Bridge Inn Road Wollert dominated awards at the Whittlesea Agricultural Show for his butter, as well as hams and bacons.[494]

From 1915 the newly formed Country Roads Board began to improve the Epping Road as far as Woodstock. Previously the road had been 'impassable in the wet months of the year'. By 1922 it was reported of the road through Wollert to Woodstock that: 'no finer illustration of furnishing facilities for carrying on light or heavy traffic can be seen in any part of Victoria'. The value of land at Wollert rose steeply as it became possible 'to run large motor lorries at a rapid speed' for the carriage of milk cans left at wooden stands along the road. As a result it appears that by 1922 the fresh milk belt had extended several miles, and was now north of Wollert, although not quite as far as Woodstock.[495]

Whether or not parts of Woodstock began to supply fresh milk, it is unlikely that new dry stone walls were built as a result. In 1942 Ernest Cotchin attested that stone walls had ceased to be built in this region around 1900, as they were then too costly to build, and harboured vermin.[496]

In 1911 the Woodstock Mechanics Institute and Free Library was built, and new families in the 1920s were sufficient to reopen the State School, although only until 1929.[497] This early twentieth century burst of growth was typical of country regions, the result of both the break-up of the pastoral estates, and (most likely in this area) the technological revolution in dairy farming, which included refrigeration, which created a major new export market for butter.

Apart from the battling family farmers, some larger farmers and notable locals built substantial bluestone residences in the area, including John Hunter and Henry Miller on Bridge Inn Road, and John Mason on Masons Road.[498]

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[489] Payne, 1975, pp.198-199
[490] *ibid*; Gould, 1990, 'Burnside Dairies, Donnybrook Road', Site 13.14
[491] 'Farming at Woodstock', *Melbourne Leader*, 9th June, 1883; 'Farming at Woodstock', *Melbourne Leader*, 16th June, 1883, p.10; 'Farming at Woodstock', *Weekly Times*, 9th February 1884
[492] 'Farming at Woodstock', *Melbourne Leader*, 9th June, 1883
[493] Gould, 1990, 'McCauliffe's House' (Site 6.04), 'Rockbank' (Site 5.06)
[494] Wuchatsch, 1985, *op cit*, pp.86-7
[495] *Weekly Times*, 1921, *loc cit*
[496] Ernest Cotchin, 'Epping farmer', statutory declaration 6th October 1942, VPRS 460/P1/1077 (Torrens Application 50369)
[497] Payne, 1975, *op cit*. pp 108-111
[498] Payne, 1975, *op cit*. p.91

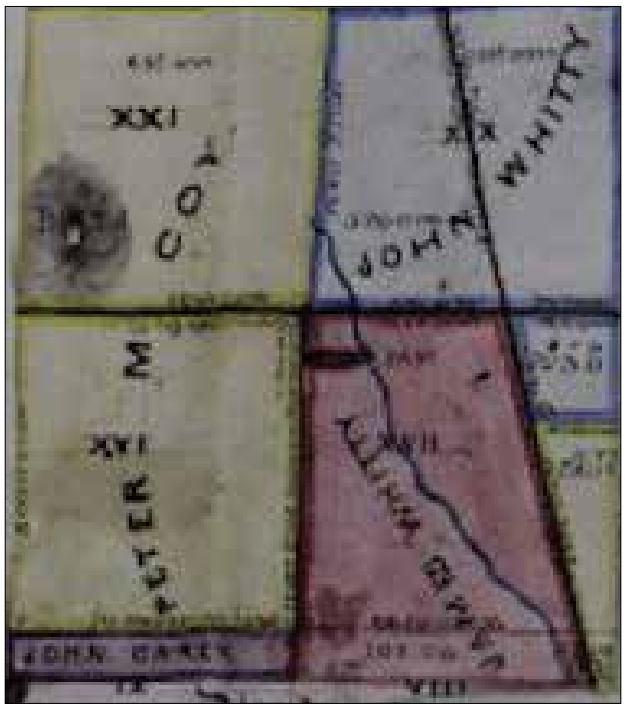


*Image 146: Early-mid 1850s map showing James Whitty's 'Woodstock', later the horse stud of Robert Hunter, on Crown Allotment 17 Parish of Kalkallo, on the south west corner of Epping Road and Donnybrook Road. The 'dam' marked on the Darebin Creek just south of Donnybrook Road, was used as a public 'waterhole' with access to it provided by James Whitty and Peter McCoy. The creek passes a narrow gap between stony rises in this vicinity. (PROV VPRS 460/P0/88, TA 10575)*

*Image 147: The former 'Woodstock' Farm, 905 Epping Road, Woodstock. Showing partly walled cultivation paddock (right) and what appears to be a partly walled stock yard, with Darebin Creek running through it, and perhaps another stock yard above it. (Google satellite, June 2019)*

*Image 148: 'Fenwick Stud' entrance wall. Being a boundary wall, it forges across instead of around the stony rise and through the red gums, powerfully intact over solid ground. (David Moloney, 2019)*

*Image 149: A cultivation paddock at Fenwick, archetypal in enclosing and separating arable land from the stony rises, but exceptional in being fully walled. (Google satellite, 2014)*

*Image 150: Part of wall separating the magnificent Fenwick cultivation paddock shown in above satellite view from the stony rise, on which horses can be seen here grazing. (David Moloney, 2019)*

*Image 151: Horse Yard, Fenwick. Some parts of the wall of this large yard are over 2 metres high. A small part has recently collapsed. (David Moloney, 2019)*

***Image 152:*** *Stone wall separating a former cultivation paddock from stony rise on 'Gilghi', immediately west of Fenwick on Donnybrook Road, and of similar setting, scale and style. Like most Whittlesea cultivation paddocks, it features lighter fencing on the softer ground. (David Moloney, 2019)*

***Image 153:*** *Former Jeffrey Rockbank farm, Masons Road, showing what appear to be partly dry stone walled enclosed paddocks on both sides of the house. (Google satellite, July 2019)*

*Image 154: An archetypal Merri–Darebin Plains dry stone wall, in this case primarily sequestering a stony rise, but probably part of a semi-walled enclosed cultivation paddock. The wall dips and dances around the foot of the stony rise, but stops immediately at softer ground, replaced by lighter fencing. The property, owned by Brown in the nineteenth century, is at 700 Epping Road. (David Moloney, 2019)*

*Image 155: Part of long straight boundary wall heading east from Epping Road near Darebin Creek, which is marked on an 1857 plan. (David Moloney, 2019)*

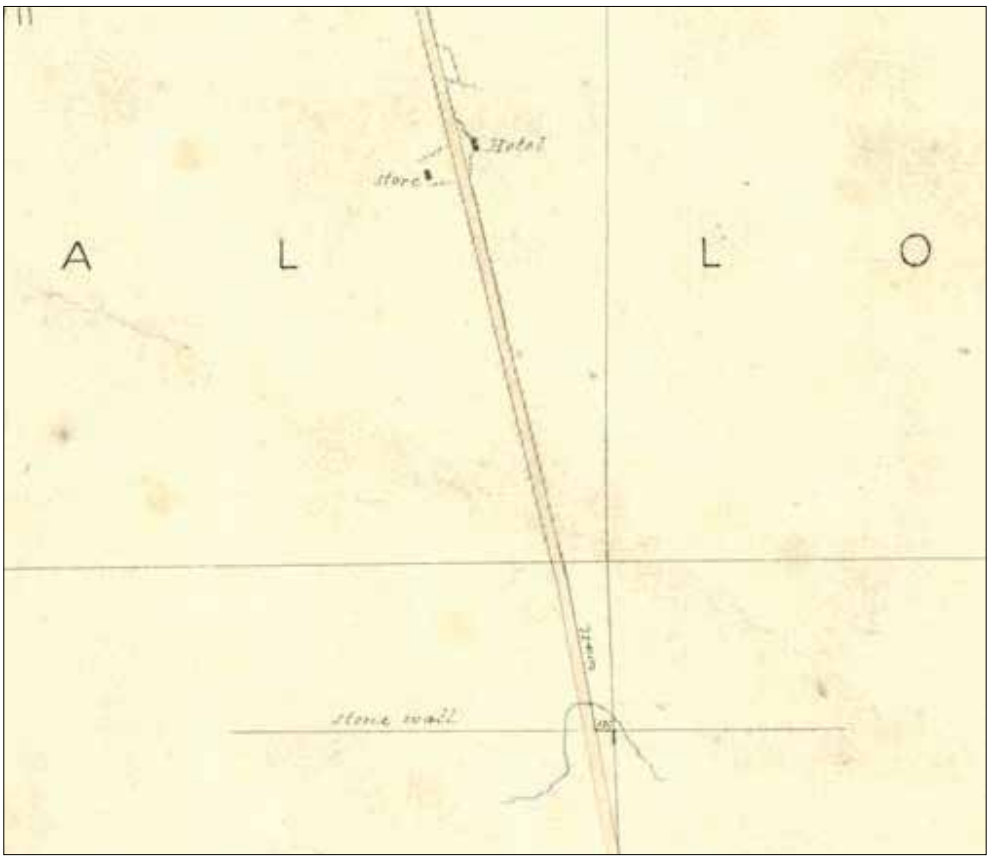


*Image 156: Epping Road south of Donnybrook Road, 1857, showing an east-west 'stone wall' and 'wall' on the east side, both of which survive, together with a stone wall south of hotel (now a residence). The fencing is only on Whitty properties, including 'Woodstock' on the west side. On the evidence of a later property lease, it is almost certainly post & rail. (PROV, 'New Roads 122', 1857)*

*Image 157: Donnybrook Road 1990. Drystone wall 'of excellent quality' may no longer survive. (Gould, Site 6.05)*

*Image 158: 'Main Road through Wollert' (Weekly Times, 14th May 1922). The road to Woodstock after CRB improvements, which commenced in 1916.*

## Medland Estate History

In 1853, as the government was selling small farming parcels of c.150 acres in Wollert, a private subdivision and sale of even smaller farms of c.50 acres took place north of Boundary Road. Known as the Medland Estate, the subdivision extended westwards from Epping Road to Thomas Wilson's *Summerhill*.[499]

This was one of a wave of private small farming subdivisions that occurred during the gold rushes. Another Whittlesea example was Henry 'Money' Miller's 'Separation' estate (although a township rather than farming allotments in that case).[500]

The Medland estate, of some 3560 acres, was primarily situated on Sections 5-8, Parish of Kalkallo. The allotments had been purchased from the Crown by JH Patterson in 1840, after which there was a trail of mortgages and sales, including to pastoralist William Furlonge. Both Patterson and Furlonge ran into financial problems in the early-mid 1840s depression; Furlonge survived by selling half of the estate. However after his insolvency in the 1850s, ownership of the land transferred to his mortgagees, John Helder Wedge, Charles Wedge, and Edward Davey Wedge. (Richard Wedge had also previously been a mortgagee.) The Medland Estate subdivision on 13th March 1853 was effectively a mortgagee sale.

The land was subdivided into thirty regular allotments, most of 54 acres gridded with north-south roads at half-mile intervals.[501] A few larger allotments, of up to 330 acres, were probably those which Gould states contained stony rises, and which were used for grazing.[502]

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[499] Payne, *op cit*, 1975, p.89
[500] Jones, 1992, *op cit*, pp.86-87
[501] PROV, Torrens Application 11788, VPRS 460/PO/1001; Payne, 1975, *op cit*, pp.89, 92
[502] Meredith Gould, City of Whittlesea Heritage Study, 1990, A10 'Medland Estate Heritage Conservation Area'

Land files for the area reveal a regular turnover of the allotments among small farmers, suggesting that the sustainable size of farms was still very uncertain in the colony.[503] At the time when parts of the Wollert Small Farm precinct were being subdivided into smaller farms, at Medland the movement was in the opposite direction, as Thomas Bodycoat, son of original purchaser William Bodycoat, gradually acquired and consolidated original allotments.

The area was for 'mixed farming', but 'sheep are not adopted by the farmers' informed a reporter for a series of articles on the 'Woodstock' district in the 1880s, describing the farms of Thomas Bodycoat and his neighbour Joseph Cotchin.[504] Again, dairying predominated, but being beyond the 15 mile 'fresh milk' distance from Melbourne, Bodycoat and Cotchin's farms produced milk for butter, which was delivered to their regular customers weekly. The separation of butter milk left a 'refuse', the skim milk which fed pigs, which was marketed commercially.

Of 422 acres (Bodycoat) and 490 acres (Cotchin) these properties were both of an order larger than the 50-150 acre size of many fresh milk farms at Wollert to the south. About 150 acres of Bodycoat's farm were estimated to be 'fit for the plough', of which some 80 acres was cropped annually. Similarly, Cotchin's area under crop seldom exceeded 80 acres. Their crops were oaten and wheaten hay, made into chaff for their own dairy herds, and working horses. These were rotated with peas, which were also fed to the pigs. Rye for green feed, and maize and mangel wurzel for the milch cows and young horses during winter, were also grown.

All of these crops, and paddocks for cows, horses and pigs, required fencing. The Bodycoat farm was subdivided 'by post and rail fences and stone walls' into 13 paddocks from 1 to 70 acres. Having larger areas of arable land, there would seem to have been less pressure for intensive and intricate enclosing of the cultivation paddocks. Still, it was reported that:

> 'the owner in enclosing them [had] to exercise some judgement and ingenuity in forming a neatly shaped paddock without taking in the patches of basalt which abound.'[505]

The transition of the freeform 1840s cultivation paddock stone walls into the regularised polygonal walls shown in 1930s Ordnance plans had evidently commenced early.

The Medland Estate area is characterised by dry stone walls which mark and preserve much of the regular rectangular alignment of the original 1853 small-farm subdivision and its roads. Visually and historically these walls are complemented by the stony rises of the area, some of which retain stands of red gum trees, and some early dwellings and farm buildings.

Substantial sections of Bodycoats Road have walls on both sides, as does a small section of Summerhill Road. A closed-off north-south road appears, from Summerhill Road, and from satellite views, to have extensive lengths of dry stone walls on both sides. Walls in the estate include both conventional double-sided all-stone walls, and what appear to be original composite stone and post & wire fencing. Typically, the walls vary in condition.

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[503] PROV, Torrens Application 11788, VPRS 460/PO/1001
[504] 'Farming at Woodstock', *Weekly Times*, 9th February 1884, p.1
[505] *Leader*, 9th June 1883, 16th June 1883, *op cit*; *Weekly Times*, 9th February 1884, *op cit*

Occasionally parts of the internal plan of the walls is adapted to the stony rises landform. The original William and Mary Bodycoat property *Langton Lodge* is the outstanding example of this, having similarities to the Harvest Home precinct in its intensive and asymmetrical plan of dry stone walls. It is a complex of dry stone walls on stony rises, which includes cultivation paddocks. It also appears to be a very good surviving example of a later vernacular milking and dairy complex on the Merri–Darebin Plains, a district in which dairying was the motivation for the construction of the overwhelming majority of dry stone walls. It retains a substantially intact iron milking shed with cow bails, and a dairy with archetypal early to mid twentieth century insulation and hygiene features including a prescribed 'air space' and stone paving, an unusual large feed annexe and machinery space, a cattle ramp set in a copse of mature red gum trees, and an outstanding complex of milking yard dry stone walls. It overlooks cultivation paddocks separated by dry stone walls from the stony rise on which it is built.

The wider complex of walls includes all-stone and half-walls, and what appears to be the remnant of a dry stone wall & hedge, now a scarce feature in the Merri–Darebin Plains. While an early report of the Epping-Thomastown region notes the surprising lack of hedged fences in an area with good rainfall and soils, the various remnants of hedge plants suggest that they were once relatively widespread.

In addition to the cultivation paddocks it includes fine stony rises with red gums, and features such as grub holes. Cut into a rise is a dry stone-lined structure which might be the remains of an early cellar or, less likely, a dam on an early English model.

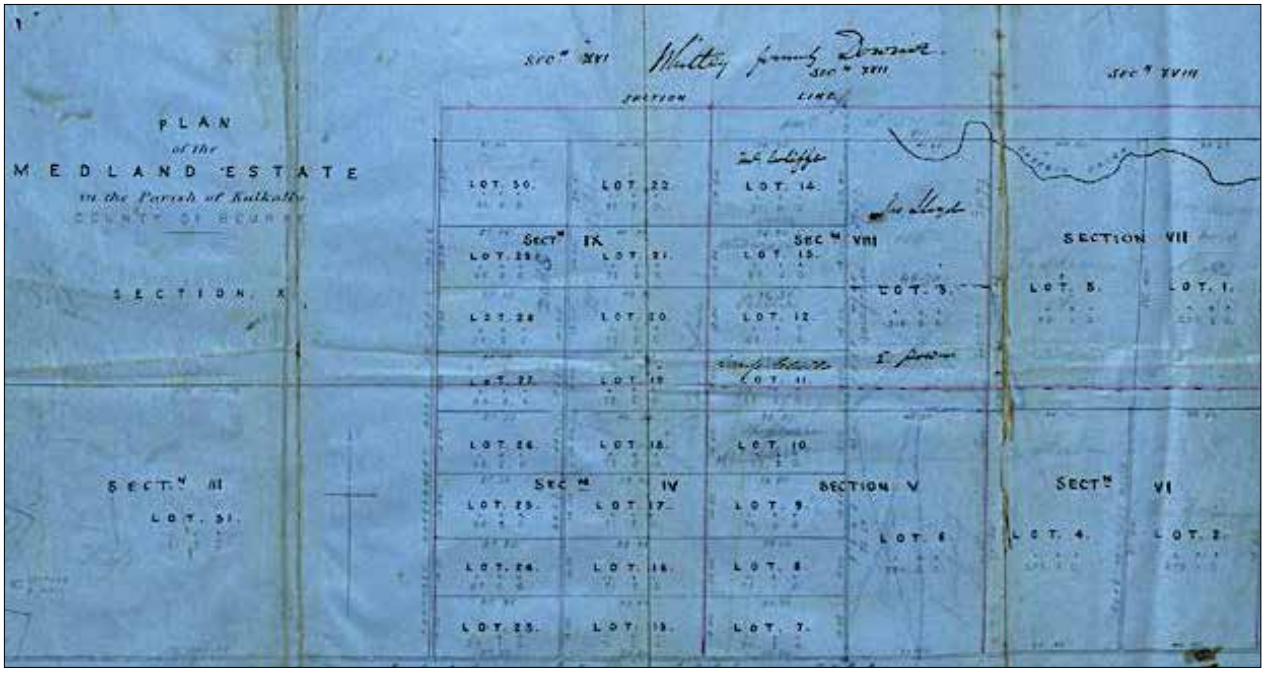


***Image 159:*** *Original Plan of the 1853 Medland Estate Plan, situated between Boundary and Summerhill Roads, including names of purchasers. Substantial portions of its grid layout are today preserved and visible in dry stone walls. There was a provision in the contract of sale that owners without direct access to roads had a right of passage over the properties of their neighbours, a provision which appears to survive today in the track to William Bodycoat's property through an adjoining property, alongside a long east-west dry stone wall. (PROV VPRS 460/P0/1001)*

*Image 160: View from Summerhill Road of part of one of Medland's long north-south boundary walls. Its spaciousness and abundance of red gums contrast with the generally more intensively developed 'Wollert Small Farming' precinct. (David Moloney 2019)*

*Image 161: Walls on both sides of Bodycoats Road. The left wall is a quite prepossessing repaired all-stone wall. The half-wall on the right, behind uncut grass, is also contributory as a composite stone and post & wire wall. It has very old timbers (some of which nevertheless appear to have been recycled) and may be an original composite, or' half' wall. However it has a base-width (c.900 mm) which is standard locally, and no evidence of cope-stones, so is apparently an early modification of an original all-stone wall. (David Moloney, 2019)*

*Image 162: Intact cow yard in front of the milking shed of William Bodycoat's farm. (David Moloney, 2019)*

*Image 163: Looking down from a stony rise on William Bodycoat's former Langton Lodge, which is separated from an arable and rich grazing paddock by one of a number of such 'cultivation paddock' dry stone walls on the former dairy farm. (David Moloney, 2019)*

## Statement of Significance: 'Woodstock Mixed Farming & Horse Stud Precinct'

*What is Significant*

The precinct is situated between the catchment of Darebin Creek in the west to the western watershed of Barbers Creek in the east, and south from Donnybrook Road to Masons Road in the south-east, and Boundary Road in the south-west.

The natural and historical characteristics which provide the context of the Woodstock Mixed Farming & Horse Stud precinct are its open red gum woodland, and its larger dairy farms. Its red gum woodlands contrast to the lightly settled pasture lands of 'open plains' immediately to its west, which is relatively bare of vegetation.

The dry stone walls in the precinct comprise roadside walls, including sections of roads with walls on both sides, on Summerhill Road, Bodycoats Road, Donnybrook Road, and a closed and unnamed north-south road south of Summerhill Road that forms part of the western boundary of the precinct and which appears to retain portions in excellent condition where it passes over stony rises. The complex also includes historically as well as aesthetically significant property boundary walls.

Across the precinct there are a significant number of the highly significant dry stone walled enclosed and semi-enclosed cultivation paddocks, some of which are in outstanding condition.

The precinct also contains impressive farmstead and stock complexes, including the walled former milking yard at *Langton Lodge*, and the *Fenton Stud* horse yard.

The integrity of the Woodstock Mixed Farming & Horse Stud precinct is high. Rural residential subdivision, with its large modern housing, and associated sheds and plantings, has not been so extensive as to impact significantly on the nineteenth and early twentieth century rural setting of the dry stone walls, and does not appear to have been responsible for the loss of any dry stone walls. Some Donnybrook Road walls identified by Gould in 1990 do not appear to survive.

The Medland Estate features roadside stone buildings, and boundary walls that preserve its original grid subdivision. Its walls appear to remain much as they would have been in its farming prime. This part of the precinct also features half-walls that may have been purpose-built as composite stone and post & wire or stone and post & wire & rail fences.

There are approximately nine cultivation paddocks in this precinct.

*How is it Significant*

The Woodstock Mixed Farming & Horse Stud Precinct is aesthetically and scientifically significant to Victoria, and historically significant to the City of Whittlesea.

*Why is it Significant*

Woodstock Mixed Farming & Horse Stud Precinct dry stone walls are ***historically*** significant to the City of Whittlesea. The dry stone walls, in particular the organic or irregularly shaped enclosed and semi-enclosed cultivation paddock walls, are an important characteristic of the Woodstock Mixed Farming & Horse Stud precinct. They epitomise the distinctive stony rises natural history of the Merri–Darebin Plains area, and the cultural history of its human modification, particularly in relation to the dominant dairy industry of the Woodstock region. (Criteria A, B, D, F)

The precinct is also partly defined by its much larger 'mixed farming' allotments, which were generally at least twice and up to five times the size of freehold farms in the fresh milk supply areas of Wollert, Epping and Westgarthtown. While many of its farms were created in the same year (1853) as Wollert, and were originally the same small size (50 - 150 acres), and similarly combined cultivation with pasture for dairy cattle, due to distance from Melbourne the product in this precinct was butter rather than supply of fresh milk, which was less remunerative, and required larger farms.

The precinct is also partly defined by the horse studs which were attracted to the aesthetics of the landscape. Similarly, the well-known Findon Harriers Hunt Club, which with strong support among local landowners, established kennel and event facilities in the precinct, and became part of the history of the district as well as of Melbourne.

The precinct is also historically associated with the Whitty family, who established the original village of Woodstock, and later became a part of the Ned Kelly story.

The Woodstock Mixed Farming & Horse Stud precinct is ***aesthetically*** significant to Victoria. (Criteria E) It is rare in Victoria – comparing with the Colac–Camperdown Stony Rises – as a cultural landscape combining stony rises, woodlands, and dry stone walls. It is set apart by its prevailing red gum open woodland. Its dry stone walls include some of the most visually impressive walls in the City of Whittlesea, some of which are likely to be individually significant to Victoria.

The dry stone walls are highly significant features of an exceptional natural landscape. In places the walled cultivation paddocks are immediately adjacent to stony outcrops of high relief, and mature red gums. Others are set around lower stony outcrops, but in parklike remnant open red gum woodlands. Where internal boundary walls forge straight across a stony rise they are usually structurally intact, sometimes with dramatic aesthetic qualities. The walls both complement and are enhanced by these remarkable landscape settings, and contribute greatly to the aesthetic values of the precinct. On the Medland Estate conspicuous property boundary walls preserve the original grid of this early rural subdivision.

In particular, as elsewhere on the Merri–Darebin Plains, the many internal walled cultivation paddocks in this area are set apart aesthetically as well as historically by their irregular shapes, which respond to the stony rise landscape. The stony rises in parts of this area are high and wide, and some cultivation paddocks commensurately larger. In addition, some of the walls appear to have been professionally built, and are higher and more intact than elsewhere.

The former milking yard at *Langton Lodge* combines the impressive formal structural aesthetics of its dry stone walls with an excellent informal setting of a later vernacular milking complex, in a natural setting. It epitomises the fundamental historical type of place in this precinct, dairying being the reason for the construction of the overwhelming majority of dry stone walls on the Merri–Darebin Plains. *Langton Lodge* milking complex, featuring a substantially intact period iron-clad milking shed and dairy, complements the outstanding dry stone wall yards in a setting of mature red gums on top of a stony rise, with views across a complex of cultivation paddocks. It is clearly one of if not the best of the diminishing number of later vernacular farm dairies on the Merri–Darebin Plains, greatly enhanced by its associated fine dry stone wall milking yard, and setting in complex of dry stone walls with grub holes, the likely source of some of the stone for the walls.

Across the precinct there are a significant number of highly significant dry stone walled enclosed and semi-enclosed cultivation paddocks. The *Fenton Stud* horse yard, cultivation paddock and boundary walls are exceptional, and of state level significance, combining notable formal structural aesthetics with exceptional informal aesthetics of cultural and natural setting.

Together with the other Merri–Darebin Plains precincts, the dry stone walled cultivation paddocks are of ***scientific*** significance to Victoria. They have the potential to provide information regarding early farming in the north of Melbourne, and on Victoria's stony rises. (Criterion C)

# Chapter Eight (Comparative Analysis:)

## Asymmetrical Dry Stone Wall Cultivation Paddocks on Stony Rises in Victoria

### Purpose

The 1930s Army Ordnance Plans show that a high percentage of the walls in the Merri-Darebin Plains province had asymmetrical, irregular (non-rectangular), plans. These patterns are confirmed in early (post 1946) aerial photography of the area. While numerous such walls have been lost, some in the recent major urban redevelopment of parts of the area, a significant number survive.

While some of these denser concentrations of walls were stockyards, the larger irregularly shaped walls appear to have been cultivation paddocks, shaped by the need to use limited areas of arable ground between stony rises for growing feed crops, and protecting them from cattle. Other walls enclosed the stony rises rather than the arable land, but the effect was the same, to carefully separate stock from crops.

Walled cultivation paddocks were built on small farms in Westgarthtown, Epping and Wollert, and also, to a lesser extent, on medium sized farms in Woodstock, and surrounding districts, including the Medland Estate. The land mainly or at least substantially consisted of stony rises, requiring the different parts of the property to be used to their best effect. The result was walls which followed the contours of the stony rises, maximising efficient use of land available for cropping, on the rich black alluvium, and grazing, on the mineral rich, 'sweet' grasses of the stony rises.

There were variations in the Merri–Darebin Plains cultivation paddocks. A few walls (mostly, perhaps, earlier ones) were organic or free-form in their plan, completely following the stony rise landform. By the 1880s they were being neatened (perhaps to facilitate cropping) by regularising curves into a series of linear steps.

The cultivation paddocks were also either fully enclosed by dry stone walling, or partly enclosed. The earliest cultivation paddocks in the area (by the early-mid 1840s) were not completely walled. This practise continued, as cultivation paddocks built from the 1850s were also often partly walled and partly fenced. The reasons were likely the easy availability of building material on the stony rises, and the advantage of lighter 'make-up', 'log', 'brush', post & rail, and post & wire fencing in comparison to heavy stone walls on the softer, wetter, ground that was characteristic of the Whittlesea stony rises. Thus cultivation paddock fencing was commonly composite: dry stone walls built around the lower contours of a stony rise (although some, perhaps later, were built along the ridge of rises); and with lighter fencing material, such as post & rail or post & wire fencing, used on the softer alluvial ground.

These patterns of walls – dense and complex, sometimes curvilinear – are thus strikingly different from the vast majority of boundary and internal paddock dry stone walls seen across Victoria, the overwhelming majority of which, for the sake of efficiency, conform to the original survey grid.

Such irregular layout of dry stone walls has not been observed or recorded elsewhere on Melbourne's fringe. Nothing similar was identified in the Shire of Melton Dry Stone Wall Study.[506] This is interesting as the Werribee Plains also has stony rises, although of a different type. These rises would appear to be fewer, smaller, much lower and without the hard edges of the Merri–Darebin Plains stony rises. Most are better described as stony outcrops with little to no rise. They have simply been cropped around, with no walling, probably as a result of larger farms with less intensive, different types of farming. This was principally cereal or hay crops followed by sheep grazing in the twentieth century. In the City of Wyndham Dry Stone Walls Study, one instance was identified of a dry stone wall on Edgars Road deviating around a stony rise; one property had a sophisticated water management system which included a serpentine dry stone wall along Skeleton Creek, Truganina.[507]

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[506] Holdsworth, J, Marshall, R, Moloney, D, Peters, SJ, 'Shire of Melton Dry Stone Walls Study, 2011'
[507] Vines, G, 'Wyndham Dry Stone Walls Study, 2014', pp.93-95, 120-121

In the City of Hume only one instance is presently known of an irregular, landscape-shaped wall, which is built across a stony rise at 40 Dwyer Street Kalkallo. However this site is being developed, and the wall has been recommended for relocation.[508] This site is also within (on the western edge of) the Merri-Darebin Plains stony rises; any other yet unidentified examples in Hume to the north of Donnybrook would also be part of this same Merri–Darebin Plains stony rises province.

The irregular walls the Merri–Darebin Plains are of visual interest and aesthetic value. They also raise historical questions that have yet to be fully addressed or studied.

The purpose of this comparative investigation is to arrive at a preliminary view regarding the number and type of comparable places in other stony rises areas in Victoria. That is, dry stone walled cultivation paddocks (designed to keep stock out of crops) whose complex or irregular shapes have been formed by or reflect the organic patterns of the stony rises landscape. And also to note other examples or precincts of irregular walls, of any purpose, which appear to have been shaped by a stony rises landscape.

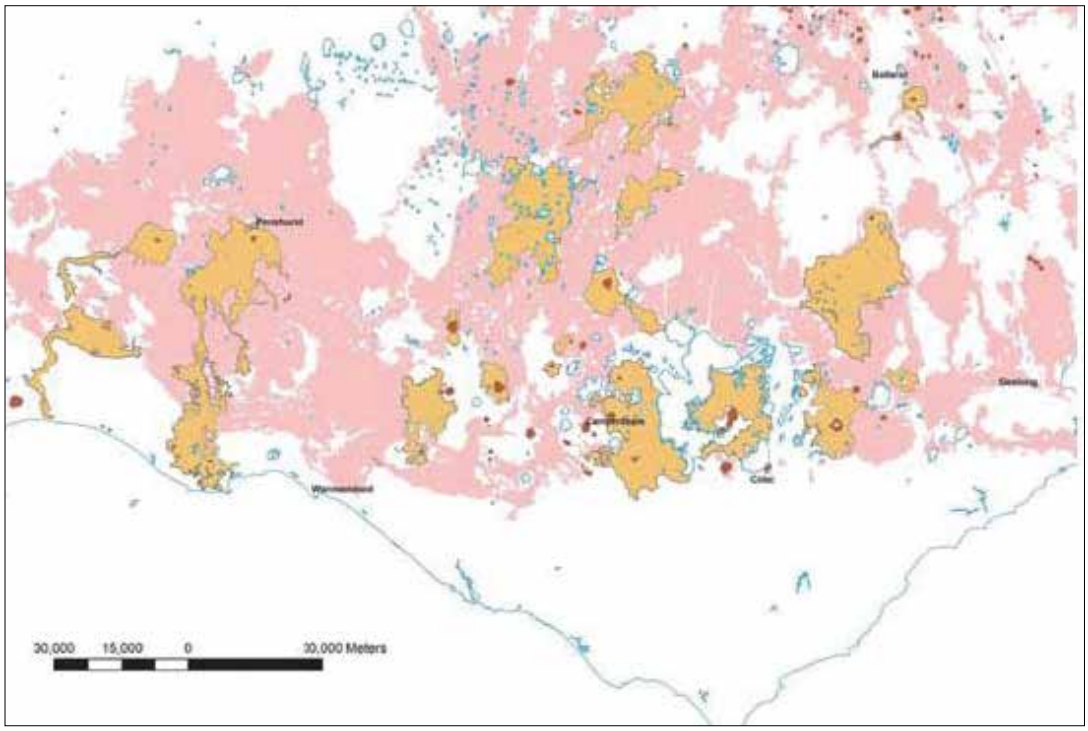


***Image 164:*** *Volcanic features of Western Victoria, older weathered lava flows shown in pink and younger Stony Rise lava flows in orange. Scoria cone volcanoes are in red, and lakes in blue. (EB Joyce, 'Geology, Environment and People on the Western Plains of Victoria, Australia', p.110) As is evident, the Merri–Darebin stony rises are extremely isolated from Victoria's major stony rise area, and perhaps also somewhat peripheral to scientific studies.*

[508] In 2012, when the property address was Donnybrook Road, it was informally inspected by the author on behalf of the Dry Stone Walls Association of Australia, which had been approached by the owner. It is at the southern end of a lava flow that issued from Bald Hill to the north, which is very vesicular in places, and which stands some 8 metres above surrounding country in this part. (Hanks, 1955, *op cit*, p.8) The east-west wall which crossed this stony rise was particularly well preserved. The site was later recorded by TerraCulture, 'The East-West Dry Stone Wall at 40 Dwyer Street Kalkallo Heritage: Archival Documentation and Conservation Management Plan', March 2016.

The findings of this comparative survey are indicative and preliminary rather than definitive. A full survey of this type would be a major project, involving systematic satellite survey of all stony rises, field proofing of a selection of sites, and some historical comparison in terms of dates and purposes. All that is far beyond the resources of this report.

The purpose of this comparative analysis is to identify any major comparable examples in Victoria, and if possible, to come to an informed opinion or hypothesis regarding whether the Merri–Darebin Plains walled cultivation paddocks might be of greater than local heritage significance.

## Method

The survey was undertaken by satellite survey of Victoria's stony rises areas, with the assistance of the 1930s-40s Army Ordnance maps.

1. A systematic satellite search, from east to west, and north to south, of dry stone walls on the major stony rises, including those of Mt Porndon, Mt Rouse, and Mt Eccles, and other stony rises areas in Victoria.

2. Satellite search of intense complexes of dry stone walls that appear on the Army Ordnance Maps for all districts west of Geelong (except the Hamilton area, which map was unavailable).

3. Contact was also made with European dry stone wall colleagues as to similar cultivation paddocks research that might provide a broader perspective or context.

## Limitations

Satellite images of the major stony rises lava flows were systematically surveyed for enclosures of dry stone walls whose plan might have been shaped by their stony rise landscape. Despite the systematic approach, walls may have been missed, and not every stony rises area in Victoria was checked. As such, the findings can only be indicative rather than definitive.

Except for publicly accessible examples on the Colac–Campberdown Stony Rises, the walls have not been physically surveyed. At times it is unclear in the satellite view whether motley shapes are a stony rise or related marshes or depressions, and whether an enclosure has been used for cultivation, or simply for stock management. However in most cases this information is clear; where unclear a paddock has not been designated a cultivation paddock. Field-work would no doubt result in additional examples being identified, and some which have been designated as walled cultivation paddocks being de-identified.

The comparative survey is also limited by lack of historical research. To properly understand if and how comparable walls are, research is required of the local history. For example, the dates of the Western District walls, and whether they were built by small farmers, or by pastoralists before 'break-up' of the pastoral estates for closer settlement, sometimes by government closer settlement schemes.

## Findings No.1: Satellite Scans of Stony Rises Areas

The survey was undertaken according to the eruption points of stony rises flows, as follows:

Mt Porndon, Pomborneit

Mt Porndon was a major source of the extensive and extremely rugged lava geomorphology between Colac and Camperdown, and the prototype of the landscape that Victorians thereafter named 'Stony Rises'. This area is now also known for the profusion and quality of its dry stone walls, and is recognised as Australia's outstanding dry stone wall precinct. Unsurprisingly, it is also the region with extensive walls whose plan has been shaped by the tortured stony rises landscape (known locally as 'barriers', on account of their impenetrability). While many of these, including the most spectacular examples, appear to have been built by pastoralists, some appear to be cultivation enclosures associated with small farms. Only a limited number of examples were identified that appear to be comparable (in terms of their origin, date, extent, concentration) to Merri–Darebin Plains walled cultivation enclosures.

One of the longest walls separating the rough stony rises country from clear arable or grazing ground is situated south of Tesbury and Tandarook. It is a product of the spectacular Stony Rises landscape, in particular parts where the extremities of lava flows form a raised, wall-like 'ring barrier'. This is a near-continuous, constantly twisting wall that extends about 9 kilometres from west to east. Parish plans show that much of the wall marks the Crown boundary between two allotments, one of which was purchased by the pastoral giants the Manifold brothers of Purrumbete, and Hugh Scott, another early pastoralist. This might explain why the wall was so fastidious in following the contours of the stony rise, rather than passing in straight lines near to its edge. The Manifolds are known to have preferred stone to wire for fencing, and enclosed their run with many kilometres of stone walls.

The wall appears to be substantially a single design, which would correspond to local belief that it was constructed by wallers brought from England to build it for the Manifolds. Most of the walls are thought locally to have been built to keep pastoralists' stock out of the extensive, exceedingly rough, and often heavily timbered stony rises in which animals might become lost, or injured negotiating angular boulders treacherously concealed under grass.[509] These walls thus appear to be the reverse of the cultivation paddocks designed to keep stock on the benign stony rises of the Merri–Darebin Plains, and out of alluvial cropping paddocks.

Smaller landowners, large farmers, may have built some of the smaller sections of a similar wall on the north side of this lava flow. A similar, but much smaller wall on the boundary of another lava flow to the east of Lake Purrumbete (east of Purrumbete Estate Road, Koallah) also appears to have been associated with the Manifold brothers, who were Crown purchasers either of this or the adjacent property.

While these walls are comparable with the Merri–Darebin Plains small farm enclosures in that both were shaped by the stony rises, and both separated stone-free land from stony rises, they are fundamentally different in terms of history, purpose, and scale.

[509] Personal conversation, 27/10/2019, Mr Steve Wakeland, of Victorian Pet Foods, occupier of the walled land around Knackery Road, Tesbury. It is not known whether consumption of bracken, which was responsible for the deaths of many cattle in the area, was particularly associated with the Stony Rises. (Rothberg, 1948, *op cit*, p.120)

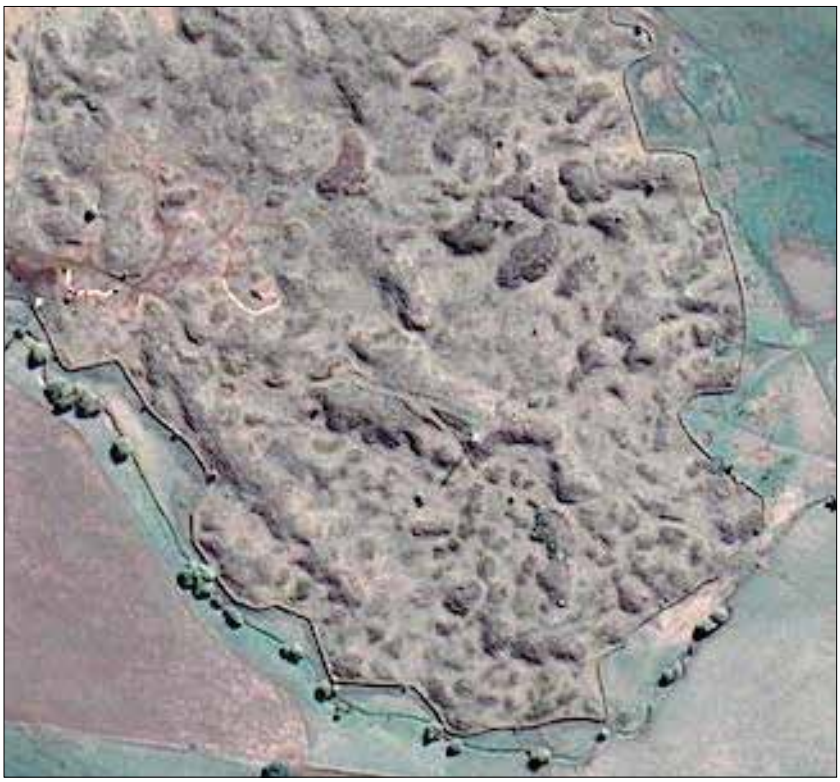

*Image 165: South of Knackery Road, Tesbury. A small portion of a very large stony rise lava flow has been separated from surrounding alluvial land by an intricately built dry stone wall around its edge, which has the appearance of a battlement. As is common in these landscapes, a drainage channel can also be seen around the foot of the stony rise. (Google satellite, 2019)*

*Image 166: Near corner of Hoses Road and Knackery Road Tandarook, part of the same stony rises and walls system. The wall separates the ridge of rough stony rises from arable or grazing land. Considerable sections of this extensive wall have collapsed. (David Moloney, 2019)*

***Image 167:*** *Another part of the same system, 8.5 kilometres to the east, on Seftons Road. This rare landscape of clear ground, stone wall, and raised 'ring barrier' stony rise retaining indigenous flora, recalls Fenton Stud at Woodstock. (David Moloney, 2019)*

Much more comparable with the Merri–Darebin Plains farming cultivation paddocks is a walled enclosure between Stoneyford and Swan Marsh, which appears to separate stony and clear ground. (Image below)

***Image 168:*** *Princes Highway, opposite Swan Marsh-Stoneyford Road, Swan Marsh. At top is an irregular, full-enclosed walled paddock that appears to separate stony rises from clear ground. (Google satellite, 2019)*

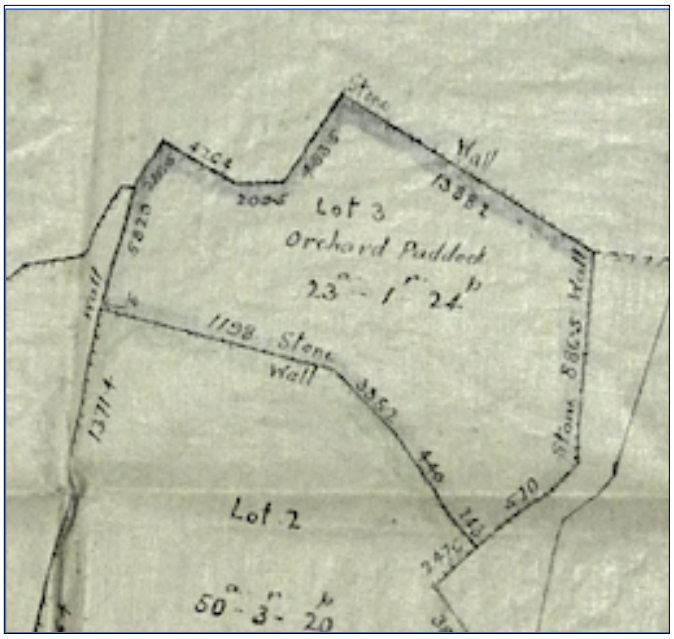


***Image 169:*** *Historical plan confirms that the top paddock is a dry stone wall (fully) enclosed paddock, to protect an orchard rather than a crop. (per Robert Wuchatsch)*

There are numerous other walls built on the stony rises of the district which are of irregular plan, appear to be walled, and might be cultivation paddocks. For example, the vicinities of Oppenheims Outlet Road, Harlocks Road, Pomborneit-Foxhow Road, Cobden-Stonyford Road, Shaws Road, Hinkleys Road, and Moffats & Hawks Nest Roads. Many of these are clearly stockyard complexes near homesteads, with angled but straight walls. Others forge straight (some with kinks or curves), across the tops of the stony rises, and are evidently large paddocks for stock management, or property boundaries. The longer ones were likely built by pastoralists. Some others, such as those near the corner of Koallah Road and Koallah-Pomborneit Road appear to separate a stony rise, but have stony rises on both sides; field survey would be necessary to determine whether such enclosures are for stock management, or were built as primarily cultivation paddocks. None of these potential cultivation paddock walls appear to be included in Heritage Overlay controls of either the Corangamite or Colac Otway municipalities.

The 'Hawks Nest Road and Environs Stony Rises' have been classified as a cultural landscape by the National Trust. This is a highly distinctive stony rises landscape, whose farming settlement, including dry stone walls, constitutes a significant part of the classification. The National Trust citation states that it was originally subdivided and sold for small dairy farms in the 1860s, but later states that its development occurred principally 'at the time of closer settlement in the 1880s–1920s'.[510] Much of this part of the Western District was developed for small farming at this later period, at the time of the break-up of the pastoral estates, and the technology-driven dairying revolution. As such this district was unusual in supporting professional dry stone wallers, apparently well into mid twentieth century. Even if the dry stone walls in this district date from the 1860s this was appreciably later than the Merri–Darebin district. There are many dry stone walls in the Hawks Nest Road area, but they appear to consist primarily of long linear walls, and some homestead stock yard complexes. Physical inspection of this area suggests that an enclosure near the south west corner of Hawks Nest Road and McGarvies Road at Pomborneit East is a walled yard of some sort, but regular in shape rather than landscape-formed, and another apparent enclosure on Moffats Road is not walled.

***Image 170:*** *North of Hawks Nest Road Pomborneit East, an area taken up by Selectors in the 1860s and 70s, is a paddock mainly devoid of stony rises, which appears to be enclosed with a stone wall. It was presumably for cultivation, but may have been for stock. The wall plan has been largely regularised. This area is dominated by straight walls, some property boundaries, but few conform with the cadastral grid of the parish plans. (Google satellite, 2019)*

[510] 'Hawks Nest Road and Environs, Stony Rises', National Trust of Australia (Victoria), Hermes No.71747

Mt Rouse, Penshurst

There are extensive stony rises in the vicinity of Mt Rouse, adjacent to Penshurst. While most of these are very lightly occupied with occasional homesteads, or former homesteads, there are also some isolated, irregularly shaped enclosures, apparently stone, that might possibly have been cultivation paddocks.

A potential precinct of five sites, disparate in style, but of interest, were identified within a range of some 7 kilometres east-west, and 5 kilometres north-south of Penshurst.

***Image 171:*** *Several small stony-rises shaped walled enclosures, Ritchie Street, on the western outskirts of Penshurst, probably too small for cultivation paddocks. (Google satellite, 2019)*

***Image 172:*** *The south-east corner of MacAruthur-Penshurst Road and Springfield Lane is a complex of small irregular paddocks, apparently small stock yards, and a larger cultivation paddock on the corner (the mottled sections within the enclosure appear to be depressions not rises). As became usual, especially on larger farms where the fragments of land 'lost' were presumably less consequential, enclosure walls were built straight across the tops of stony rises, rather than fussily tracing their contours, requiring less wall construction and ensuring a firm wall foundation. (Google satellite, 2019)*

Mt Napier, south of Hamilton

A c.2.5 kilometre wall separates a stony rise, evidently used for pasture, from a long cultivation paddock which appears to have been created by drainage. In terms of purpose, this wall compares directly with the Merri–Darebin Plains enclosure paddocks. However it is likely to be considerably later, perhaps dating to the construction of the drain, and is also on a much larger scale. The wall has also been built in a linear form across the top of a stony rise, rather than around it; this would have been more economical to build and maintain, and is a practise that appears to have occurred later, and on larger farms (or farm) where space was not at so much of a premium as it was on the small farms of Epping–Wollert.

This wall appears to be isolated, and not part of a precinct of similar walls.

***Image 173:*** *Part of a long wall which divides a stony rise from cultivation paddocks that appear to have been created by 'Louth Drain', which is visible across the bottom left corner. This walled, landscape-formed cultivation compares with those in Merri–Darebin Plains, but again is almost certain to be much later, and is at a completely different scale. Spoldings Road is to the south, and Crusher Road (not shown) is to the north. (Google satellite, 2019)*

Mt Noorat, and associated eruption points, Noorat

One superb walled enclosure on the Terang-Mortlake Road is one of the best examples of an irregular dry stone walled cultivation paddock discovered in this survey. Situated directly below Mt Noorat, on the edge of the Noorat township, it is of substantial size, and nearly fully enclosed by walls in exceptional condition. Its west side separates the arable land from the stony ground. As occurs also on the Merri–Darebin stony rises, it breaks this natural interface down into regularised rectilinear lengths.

Again however, it is isolated: there are apparently no similar walls nearby. Other cultivation paddocks in nearby Glenormiston area are enclosed with post & rail fencing.

The Glenormiston Parish Plan shows that the Noorat property was granted to a D Carson in 1863, so the wall was built sometime after that date.

*Image 174: This enclosure situated on the edge of Noorat, is almost fully walled, only the short south length being post & wire fencing. (Google satellite, 2019)*

***Image 175:*** *View south, Terang-Mortlake Road to the perfectly formed, intact enclosure walls. Its irregular western wall (distant) appears to separate it from stony ground. (Google street view, 2019)*

Some 25 kilometres to the west, isolated in a larger property (729 Ellerslie-Panmure Road Framlingham) is what appears to be a fully walled, enclosed, polygonal, cultivation paddock. This paddock is the remains of a formerly dense complex of homestead walls shown on an early twentieth century Defence Ordnance map. Its size is comparable to the Merri–Darebin Plains cultivation paddock walls. Again however it appears to be very isolated, without any other walled enclosure in the vicinity. Its date is unknown.

***Image 176:*** *729 Ellerslie-Panmure Road Framlingham, showing a neat cultivation paddock separated from the stony rises by a dry stone wall. (Google satellite, 2019)*

Mt Eccles (Budj Bim), near MacArthur

No comparable enclosures were found on this major stony rise flow.

Mt Elephant, Derrinallum

In this area are numerous stone walled complexes of stockyard and small enclosures adjacent to homesteads or former homesteads. However they do not appear to be separating stony from arable land; their form is rectilinear, unrelated to their stony rises landscapes.

Mt Vite Vite, Mt Widderin, between Derrinallum and Skipton

These and other eruption points, and the Mooralla Flow, are to the north of Mt Elephant, in the Lake Bolac-Skipton area.

The cultivation paddocks in this area appear to be modern, without stone walls, and routinely without fences of any sort, as the cropping is carried out around and between the stony rises.

As sometimes appears in extensive stony rise areas, an enclosure is found in what seems to be a wilderness. The image of one of these (below) may have been a cultivation paddock (or partly a cultivation paddock) but given its isolation, what appears to be stone inside part of it, and the complex of adjacent smaller yards, it may have been a former sheep holding yard of some sort. Its date is unknown, but could conceivably be early.

***Image 177:*** *Site east of Vite Vite – Skipton Road, Bradvale. (Google satellite, 2019)*

Mt Warreinheip, Ballarat

Nothing was found on the stony rises in this district.

Mt Buninyong, Buninyong

Nothing was found on the stony rises in this district.

Mt Moorookyle, north of Smeaton

Nothing was found on the stony rises in this district.

Mt Shadwell, Mortlake

Nothing was found on the stony rises in this district.

## Findings No.2: Satellite Scans of Complexes Marked on Historical Maps

The early twentieth century Ordnance Maps show numerous intensely developed complexes of small walls on the Western Volcanic Plains.

The following maps were examined: 'Corangamite' (1916), 'Beeac' (1916), 'Cobden' (1916), 'Colac' (1916), 'Port Fairy' (1942), 'Lismore' (1943), 'Mortlake' (1941) and 'Beeac' (1948). Apart from 'Dunkeld' (map missing) maps cover all of the Western District stony rises.

All of the potential complexes were checked on satellite images (except for the missing 'Dunkeld', south-east of Hamilton). Most of the complexes of walls shown on these maps were found not to exist now. Others were simply rectilinear, their plan seemingly unrelated to the landscape.

Three surviving examples, on stony rises, of potential interest were found:

- 2200 Hamilton Highway Murgheboluc

  Part of property on stony rises, but walls appear to be minimally related to the landscape.

- 1725 Darlington-Terang Rd, Kolora VIC

  Most of this complex of walls appear to be conventional stock yards near a homestead. A larger irregularly shaped paddock, although encompassing a stony rise, is likely a cultivation paddock.

- 729 Ellerslie-Panmure Road, Framlingham East

  A single paddock adjacent to an isolated homestead appears to be a very well defined cultivation paddock (Image 176).

In conclusion, a few examples of single cultivation paddocks were found through Ordnance maps. However they were isolated from other examples, the closest being some 40 kilometres apart. Nothing was found that was comparable with the Merri–Darebin precinct of cultivation paddocks.

## Findings No.3: International Information[511]

Responses were received from most contacts in England, Ireland, Wales, Scotland, Canada, USA, France, Spain, Croatia, Germany, Cyprus, Sicily and Italy.

Irregular dry stone walled cultivation paddocks are common in Europe, although of a much earlier date. No information came to light regarding examples in the Orkney Islands, or Mallorca, where some similar landscapes and walls were reported.[512]

The two most substantial sources, from Croatia and Britain, are discussed here. Firstly, a scholarly paper on walled enclosures and cultural landscapes in Croatia demonstrates what further research of the distinctive Merri–Darebin walls might tell us about Victoria's farming and natural history. Secondly, from the rich colloquial tradition of English dry stone wall literature a recent publication provides valuable information regarding the construction (rather than the plans) of cultivation paddocks.

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[511] I am indebted to Raelene Marshall for these international references.
[512] Dr Bernard Joyce, personal conversation, 2009. (NB, some extensive information was received later from the Consell de Mallorca)

*The Croatian Adriatic Semi-Enclosed and Enclosed Fields*[513]

This systematic project is documenting and analysing the internationally significant dry stone walls and terraces of the Croatian Adriatic region, including the extensive and complex 'enclosed' and 'semi-enclosed' small fields which dominate the landscape.

The project advances more informal English and Irish surveys and analyses of dry stone walls in cultural landscapes. It employs two primary classification categories – the type of land 'use'; and the what it calls the 'structure', meaning the pattern of fields. These are followed by numerous subcategories and archetypes. As in the Merri–Darebin Plains dry stone walls, the foundations of all of these categories are twofold: geomorphology and history.

The study provides a pertinent comparative framework for dry stone walls on the Merri–Darebin Plains. The most typical dry stone wall in the Croatian Adriatic is also the most ancient type of wall, built 'not only for protecting cultivated land from animals' trespassing, but also for depositing the excess stone.' These are thus exactly equivalent to the Merri-Darebin Plains' distinctive 'cultivation paddock' walls, which were built primarily to separate stock from crops, and secondarily to clear field-stone from the area to be farmed, originally for grain crops, and then stock feed. It also appears that, as on the Merri–Darebin Plains, the great majority of the Adriatic walls were shaped by the landscape, with organic, irregular plans.

The Merri–Darebin mixture of regular and organic patterned walls, and their respective origins in either the colonial survey or the natural landscape, also connect to the larger perspective of the Adriatic, where early irregular forms of 'enclosed fields' – the result of the geomorphology and the historical practises of primitive communities – were later overlain with the imperial influence of Greece and Rome, which regulated agricultural parcels into rectilinear forms.

In common with Australia and much of the world, most of the Croatian dry stone walls were built in the late nineteenth century. As in the Westgarthtown–Epping–Wollert district, and to a lesser extent Woodstock, the effort that justified the building of Croatia's most intensive and complex patterns of semi-enclosed and enclosed walled fields was more valuable agro-pastoral production, made possible where markets were near, and natural fertility permitted.

Ultimately however, as on the Merri–Darebin volcanic stony rises, the 'irregular and organic terrace and enclosure patterns' of Adriatic Croatia are primarily the consequence of the 'topographically complex areas', the distinctive rocky (limestone) geomorphology of the district.

While neither the scale nor the intensity of the patterns of enclosed and semi-enclosed walls on the Merri–Darebin stony rises compares with those of Adriatic Croatia, the local cultivation paddocks also exhibit 'repetition of the same spatial pattern'. The scale and density of the distinctive Merri–Darebin 'complex ensembles' are also of course unique, directly related to their uncommon 'stony rises' landscape, and to singular historical influences such as land policies in the 'Wakefieldian' and 'gold rush' eras, increasing demand from the adjacent metropolis, and to a German ethnic influence.

The Croatian study provides a framework to document and assess dry stone wall cultural landscapes everywhere. In particular, the use and patterns of its enclosed and semi-enclosed walled 'fields' closely correspond to and illuminate the significance of the cultural landscape of semi-enclosed and enclosed 'cultivation paddock' dry stone walls on the Merri–Darebin stony rises.

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[513] Goran Andler, Filip Srajer, Anita Trojanovic, 'Discovering cultural landscape in Croatia: History and classification of Croatian Adriatic enclosed landscape, *Annales for Istrian and Mediterranean Studies*, Vol. 28, 2018, Issue 4, pp.759-778. https://www.researchgate.net/publication/330169109_Discovering_cultural_landscape_in_Croatia_History_and_classification_of_Croatian_adriatic_enclosed_landscape

*British Dry Stone Wall History*[514]

British and Irish literature on dry stone walls tends to emphasise the rich styles, techniques and aesthetics of wall construction more than their historical development. This discursive, illustrated study considers in additional detail the history, use, and construction morphology of UK dry stone walls, without the more systematic regional surveys, taxonomies and comparisons attempted in the Croatian Adriatic analysis.

As in Croatia, the evidence is that British dry stone walls have been built to separate the two primary types of farming – cultivation and pasture – since prehistoric times. As in Croatia 'a first priority' was to construct walls 'to keep livestock out of the growing crops.'[515]

While there is no analysis of the specific plan of cultivation fields (their pattern in the landscape), it is evident that they were much smaller than the commonages pasture stockades; together with all early walls, they were also irregular in plan. Plans or patterns of cultivation paddock walls in the UK are said to derive substantially from historical factors (such as ownership, traditional field boundaries and farming practises, and other local precedents). Although satellite views, for example of the Yorkshire Dales, provide evidence of enclosures shaped by rocky landscapes, the book does not consider the impact of the micro-landscape or geomorphology on their plan, as in the Croatian Adriatic study.

The major distinction identified is between early walls, and 'modern' walls, the latter associated with the 'enclosure' of commonages, especially as a result of the Parliamentary Enclosure Acts from the mid-eighteenth century but overwhelmingly in the early nineteenth century. Winchester identifies significant differences between these eras, in terms both of plan and construction, that relate directly to the Merri–Darebin cultivation paddocks.

Firstly, in relation to their plan or pattern, the early walls were irregular, the organic result of untold seasons of practical farming, whereas the legislated walls of the Enclosure Acts were rectilinear: 'the new landscapes created by these processes were laid out on drawing boards in the offices of land surveyors.'[516] The older 'rubble' walls, with their 'intimate irregularity', were substituted by a 'landscape of right angles and straight lines.'[517]

Secondly, the construction of walls also changed. The dimensions and form of the 'modern' dry stone wall, which is today's convention – for example height, width at base, and use of copestones – were specified in each enclosure statute. The 'walling' profession that emerged in response to this explosion of wall building reinforced the standardisation; for example in terms of preferences for uniform stone size, double-wall construction, coursing, and use of walling frames to maintain a consistent batter or cross-section of walls.[518] Winchester laments the consequent reduction of 'the richness of regional diversity', and of historical construction forms.[519]

While absolute dating of walls is often impossible, 'the presence of large boulders and orthostats' (large stones place vertically, standing on their narrow rather than flat sides) is essentially a diagnostic of an early wall.[520] This, he deduces, is because the earlier walls utilised field-stone, including large boulders, cleared from the land: 'large boulders, some set as orthostats … are often found in walls surrounding what are arguably early cores of arable land'.[521] So these earlier, often less tidy walls, thus incorporated a wider variety of stone sizes than the new 'enclosure' boundary walls, whose more uniform sized stones were often obtained by quarrying, not simply from field stone.

The pre-enclosure British walls correlate strongly with characteristic aspects of the Merri–Darebin Plains walls, both of which contradicted of nineteenth century (and current) convention in Britain, and Victoria: the use of oversize, sometimes massive stones ('boulders'); and placement of large flat-sided stones on their edges.

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[514] Winchester, Angus JL, *Dry Stone Walls: History and Heritage*, Amberley Publishing, Gloucestershire, 2016
[515] *ibid*, pp.10-11
[516] *ibid*, p.40
[517] *ibid*, p.42
[518] *ibid*, p.44
[519] *ibid*, p.8
[520] *ibid*, pp.23, 25
[521] *ibid*, p.21. Perhaps, as in the Merri-Darebin Plains, the flatter stones used as orthostats were in fact extracted from the surrounding rocky areas, rather than simply cleared from the land to be cultivated.

The primitive origins of the more organic type of construction was attributed by another source to the Celts. The use of massive boulders and orthostats drew the conquering Romans to describe these pre-existing walls as 'cyclopean', the exact description used in this study to describe this characteristic of the Merri–Darebin plains walls.[522]

*The Merri–Darebin Plains cultivation paddocks have a distinctive organic plan. Are they also notable in featuring a more primitive construction than the surveyed rectilinear external and internal boundary walls of the district? While further systematic research is recommended, observation, including review of photographs collected during this and other studies, suggests so. Boulders and flat-sided orthostats usually appear in rectilinear walls whenever they cross a stony rise, where this material is immediately to hand. But, although not the full lengths of these walls, they are notably more abundant and intensively used in cultivation paddocks. The integral, rather than incidental, association of cultivation paddocks with stony rises and their oversize and flat-sided rocks would suggest that this would be the case.*

*This potentially notable aspect of the Merri–Darebin Plains needs to be further researched.*

## Discussion

The object of this satellite survey has been to identify other examples of stone-walled cultivation paddocks whose complex or irregular shape has been formed by or reflects the organic patterns of the stony rises landscape.

Dozens of enclosure walls, shaped by stony rises, and similar to those on the Merri–Darebin Plains, have been found on the Newer Volcanic stony rises. One of these (at Noorat) is an outstanding specimen.

On the Colac-Camperdown Stony Rises some prepossessing walls, of magisterial length and in places height (like most walls they have deteriorated significantly through neglect), separate stony rises from arable or grazing land. Initial research suggests however that they are essentially different in history and purpose to the cultivation paddock of the Merri–Darebin Plains. They warrant more comprehensive research and comparative analysis, with a view to providing them with heritage controls at the local and likely also the state level.

Surprisingly little has been found that is directly comparable to the Merri–Darebin plains cultivation paddocks, which appear to be distinct in a number of important respects:

1. Size of Farms

   The walls on the Merri–Darebin plains were built on small to medium sized farms, many of which were very small due to the profitability of the nearby Melbourne fresh milk market. In contrast most walls on the Western Plains appear to be associated with larger farms. Some of the walls, including most of the most visually impressive examples on the Colac–Camperdown Stony Rises, appear to have been built by large pastoralists.

[522] Gerry Jones, 'Dry Stone Walling: Rock of ages, cleft for me', 13th November 2014, in Merchant & Makers: Celebrating Craft, Design & Heritage: http://www.merchantandmakers.com/history-of-dry-stone-walls/; this source claims that orthostats were also part of Viking construction.

2. The Scale and Shape of Enclosures

While the western volcanic plains enclosures are sometimes at a larger scale, the stony rises landscape itself is the major determinant of size, so sizes are often similar. What is different however is that most walls on the western parts of the Newer Volcanic Plains do not bother to follow so fastidiously the contours of the stony rises, but rather to go over the top them, in linear sections. This is seen to a small extent on the Merri–Darebin Plains, and more particularly on larger farms.

Probably for the same reason – that space was less critical – very few examples were found in the Western Volcanic Plains stony rises of walls which regularised the interface between the stony and arable land by straight lines. No examples were found of the regularised, perpendicularly stepped walls of the Merri–Darebin Plains, especially on the small Epping–Wollert farms.

3. Period of Construction

Small farming came later to the Western Volcanic Plains than it did to the Merri–Darebin plains, which was the first designated farming land to be sold in Port Phillip (1838). It was farmed from that time, and it is possible that some 1840s walls remain in Whittlesea, which would be rare if not unique in terms of confirmed dates of dry stone walls, and notable in terms of European heritage in Victoria of any sort. Westgarthtown walls were built from 1850, however most of the Whittlesea walls date from the 1853 Crown land sales and private subdivisions into small farms.

It is likely that the walls on the Merri–Darebin area were built earlier than the great majority of walls in the Western District. The great majority of pre-1860s walls in that district (especially the Stony Rises) would have been built by pastoralists, who dominated rural freehold land until that time.

While the Corangamite Heritage Study states that some dry stone walls were built in the 1840s, where they are and whether they survive is not stated. Most walls in the area are said to date from the 1860s.[523] Although the Western District pastoralists purchased most Crown land, especially the best land, by 1864 pastoralists such as Neil Black of Mt Noorat sense that they were 'men of yesterday … the democrats of the day in all things having a majority.'[524] Unsold portions of Crown land, including land on the Stony Rises for example, were alienated for small farms under Selection Acts in the 1860s–70s. However it was not until the late nineteenth century and early twentieth century, with the break-up of the pastoral estates, and the revolution in butter dairying, that small farming erupted across the region. While on the Stony Rises numerous dry stone walls were built by small farmers (and professional wallers) in the twentieth century, this was exceptional within Victoria, as generally the era of dry stone walling had passed.

Especially in the absence of contextual and particular histories, these generalised remarks are subject to confirmation by further specialised studies of dry stone walls in these areas.

[523] Helen Doyle, Heritage Matters Pty Ltd, 'Corangamite Heritage Study Stage One Thematic Environmental History', in Westbrooke, S, Tonkin, R, 'Corangamite Heritage Study, Stage 2, Volume, Reviewed and Revised Thematic Environmental History', p.28

[524] Margaret Kiddle, *Men of Yesterday: A Social History of the Western District of Victoria 1834 – 1890*, MUP, 1983

4. Precincts

Despite the suburban and industrial development that has been occurring over recent decades, numerous cultivation paddock walls remain across the farming portions of the Merri–Darebin Plains.

While of course every wall, or precinct, is unique in some sense, the Merri–Darebin Plains walls are distinctive. This is the consequence of both the stony rises across the greater part of this area, and the relative homogeneity of intensive agriculture (primarily dairying) south of Woodstock.

The cultivation paddock walls on the Merri–Darebin Plains stony rises have an organic or irregular plan, which is distinctive and vastly more visually and historically interesting than the vast majority of Victoria's linear walls.

This preliminary comparative survey confirms that walled cultivation paddocks of irregular, landscape-determined plan are not unique to the Merri–Darebin plains. They are a 'type' of wall that is widespread enough to warrant serious historical research, and comprehensive thematic heritage identification and assessment. Individual specimens of landscape-shaped walled cultivation enclosures have been found on Victoria's stony rises that are as (or more) impressive structurally, in size and craftsmanship, than Whittlesea walls of the same type.

Surprisingly however, this survey has identified very little that is comparable with the Merri–Darebin Plains in terms of a precinct. Only two other potential precincts were identified.

Colac-Camperdown Stony Rises

This district generally has no competitor at the national level in terms of the extent, density and quality of its dry stone walls.

Twelve potential cultivation paddocks were identified from satellite views of this area. These were spread over an area of some 23 kilometres east to west, and 10 kilometres north to south. Five of these are within 6 kilometres of Pomborneit, with another two in the Hawks Nest Road – Pirron Yalloak area, on land taken up by Selectors from the 1860s.

In addition to these are the very singular, long walls built around the edges of three discrete stony rise lava flows in an area extending 16 kilometres north-east from Tesbury to Pomborneit North. The most extensive by far appears to be that south of Tesbury and Tandarook. The area from Pomborneit North to Pomborneit features similar but less intricate walls. In between there are several smaller lengths around Koallah.

These walls are comparable with the Merri–Darebin cultivation paddocks in respect to separating stony and stone-free land, but there is unlikely to be anything to compare with them anywhere in terms of wall type (design); they are also significant in terms of length, and quality of construction (although large lengths are deteriorating).

With regard to purpose and date of construction however they are not comparable with the Merri–Darebin Plains cultivation paddocks. Most were constructed by large pastoralists, as boundary fencing, or to keep stock out of the treacherous stony rises in that district. They are also likely to date from the 1860s, when remnant Crown land was sold to selectors.

Penshurst

There appear to be five, possibly six, cultivation paddocks within 4 kilometres of the town of Penshurst. One possible site is on the east of the town, but others are to the west, three near or on Springfield Lane. These include two dry stone wall enclosed paddocks situated on town blocks at the west end of Ritchie Street which appear too small to have been conventional farm cultivation paddocks.

The Merri–Darebin Plains

At this point it is estimated that some 17 separate properties with cultivation paddocks fully or partially enclosed with irregular stone walls have been identified in this area. Some of these properties, for example 80 Harvest Home Road Wollert, and also the Craigieburn Grasslands either side of O'Hern's Road, appear to contain three or more such enclosures. It has not been possible to inspect some of these enclosures.

The 'density' for this precinct is roughly estimated to be about 1 site per 6 square kilometres, a little higher than the Penshurst area, but with approximately four times the number of cultivation paddocks than Penshurst appears to have. The Stony Rises density of its estimated 14 discrete enclosed cultivation paddocks (which doesn't however include the long walls around the raised stony rises) is less than a quarter than that of the Merri–Darebin Plains precinct.

Prior to the urban development of the last few decades, the Merri–Darebin Plains precinct density would have been nearly double what it is at present, and more again if the Westgarthtown walls, which were urbanised earlier, were considered. Thus the remaining walls are demonstrative of a district that was always unique and exceptional in terms of the density and extent of its irregular walled paddocks. The complexity of some of these Merri–Darebin Plains walled enclosures is far greater than any enclosed paddock walls identified elsewhere in Victoria.

On the small farms around Epping–Wollert it was evidently crucial to maximise use of the land, and intricate walls were built to separate the landforms which were used primarily either for cultivation and pasture. Also, a very high proportion of the farmers in this district were of German ethnicity, who had shown at Westgarthtown their industry and propensity to build complexes of dry stone walls. On the primarily Anglo-Irish 'mixed farming' properties a little further north at Woodstock, dairying (for butter) remained the main agricultural activity, meaning cultivation paddocks were still required for feed-crops, but those properties were larger, and cultivation paddocks there more sparsely developed.

The Merri–Darebin Plains stone wall cultivation enclosure precinct is then the unique product of a singular combination of topography and history: the stony rises; early farming development; and the dominance of the fresh milk and dairy industry as a result of proximity to Melbourne. There appears to be no other precinct in Victoria which compares with it in these respects, and in terms of overall density of walled cultivation paddocks.

The most comparable area is the Colac–Camperdown 'Stony Rises', also a unique precinct in which pastoralism has generated some long walls with complex plans shaped by the stony rises. While some of these were property boundaries, others were built to keep stock out of the stony rises, the converse of the smaller 'cultivation paddock' or 'enclosure' walls which characterise the Merri–Darebin Plains.

The Merri–Darebin Plains stone wall cultivation enclosure precinct, which dates to the 1840s, but most of which dates from 1853, is also likely to be notably earlier than both the Stony Rises and Penshurst precincts.

Although many have been demolished, and most of those that survive are not visible from the public domain, some are conspicuous, and their overall number and distribution make a distinctive contribution to the unique landscape and history of the Merri–Darebin Plains.

## Conclusions

The premise of this survey was that the irregular stony rises shaped walled cultivation paddocks in the Merri–Darebin volcanic district warrant assessment at the state level. That is, that they are historically significant by virtue of acknowledged qualities including their: continuation of an 1840s practise; virtually homogeneous association with a single industry; pervasiveness throughout this single landscape; association with the early dairy industry, especially the supply of fresh milk; association with the German community; and their certain uniqueness in the Melbourne region. And also that they might have aesthetically significant visual qualities that are potentially noteworthy beyond the local level.

Although not comprehensive, this survey has examined satellite images for all the major stony rises, and many of the minor ones. Some outstanding examples of individual land-formed or irregular walls have been identified that are either equal to or better than those in the Merri–Darebin Plains stony rises precinct. As yet, nothing has been found that is comparable in apparent purpose, extent or intensity of the dry stone walled cultivation paddocks at Wollert or Woodstock.

Working on the historically-based assumption that other comparable precincts would be need to be in areas of small farms and probably close to a major market or population centre, the survey is sufficient to strongly postulate that the Merri–Darebin Plains precinct of dry stone walled enclosure paddocks, whose irregular and organic shapes have been formed by the stony rises, is at least rare, and more likely unique, in Victoria.

Further, it is likely that the Whittlesea walls, most of which would date from the 1853 sales of small farming allotments, were built early, either as cereal cultivation paddocks, or stock-feed paddocks as dairying took hold from the mid 1850s.

In addition, evidence of mid 1840s partially walled irregular cultivation paddocks in the district is exceptional, and further sets this precinct apart. In addition, new evidence in this report supports the possibility that cultivation paddocks near O'Herns Road date to this early period. Pre-gold-rush dry stone walls would be rare, and exceedingly important evidence from the first farming era in Port Phillip; these 'early farming' walls warrant further historical research, and archaeological investigation.

The substantial remaining representation of post-1853 Merri–Darebin Plains stony rises cultivation paddock walls is sufficient to constitute a precinct. However, the loss of the walls at 80 Harvest Home Road would represent the loss of the most intensely developed remaining complex of small farm cultivation paddock stone walls in Whittlesea; it is the most intensely developed known complex of agricultural (ie, not stock yard) dry stone walls surviving in Victoria. It also includes historical documentation with rare potential for interpretation. The case for state level significance of the precinct would diminish if it was lost.

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Victorian Heritage Database

Victorian Resources Online

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City of Whittlesea

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