

## COMMONWEALTH OIL REFINERIES CO. BUILDINGS

<b>Address</b>	Part 1A and 39-81 Burleigh Street, Spotswood
<b>Significance</b>	Local
<b>Construction Dates</b>	Northern Utility + Office Building 1924, Southern Office Building 1940
<b>Period</b>	Interwar
<b>Date Inspected</b>	Early 2021



Northern utility building (1924)



Southern office building (1940)

### Statement of Significance

#### What is Significant?

The *Commonwealth Oil Refineries Co. Buildings* at 39-81 Burleigh Street, Spotswood, consists of two single storey Interwar period buildings – a utility + office building constructed in 1924 and an office building constructed in 1940.

The significant features/elements are:

- Utility + Office building (1924) - gabled and parapeted roof forms, corrugated roof sheeting, eaves, oculus vents to the gabled ends and red face brick walls. The metal sliding door, brick piers, blind niches, rendered/concrete lintels and brick sills are also significant. The multi-paned metal windows which included a horizontal pivot window are notable.
- Office building (1940) - gabled roof, terracotta roof tiles, corbelled eaves, red face brick walls and timber windows and doors. Clinker brick elements and Roman brick detailing are also significant.

#### How is it Significant?

The *Commonwealth Oil Refineries Co. Buildings* at 39-81 Burleigh Street are of local historical, rarity and representative significance to the City of Hobsons Bay.

#### Why is it Significant?

The *Commonwealth Oil Refineries Co. Buildings* at 39-81 Burleigh Street are of historical significance as buildings developed by Commonwealth Oil Refineries Co. (COR) to support Australia's first oil refinery built at Altona North in 1924. The subject buildings played a pivotal role in the operations of the site as a repository tank farm by coordinating the storage and pumping of crude oil to the refinery. The buildings are associated with the establishment of the COR in 1920 who were pioneers in the refining of crude oil products in Australia.

The two adjacent Interwar period buildings are the main surviving elements at the site. The northern building constructed in 1924 and indicative of the initial phase of development, whereas the southern building was constructed in 1940 and is indicative of the

ongoing development and expansion of the COR facilities between the 1930s and the 1950s, which reached a maximum at this time.

More broadly, the buildings are associated with the emerging petrochemical industry in Australia and concentration of oil/petrochemical complexes that were established at Spotswood during the early part of the twentieth century. (Criterion A)

The 1924 utility + office building is rare surviving evidence of the earliest phase of development of COR and the petrochemical industry in the municipality and Australia. (Criterion B)

The *Commonwealth Oil Refineries Co. Buildings* at 39-81 Burleigh Street are of representative significance as intact examples of Interwar period buildings that were designed as utility and/or administrative buildings but in different manners according to the time of their construction.

The detailing of the northern building is representative of the early part of the Interwar period with its rendered/concrete lintels and steel-framed windows, the latter which incorporate an uncommon horizontal pivoting section. Differing internal functions are indicated by blank wall sections and blind niches.

The southern building operated in an administrative capacity and displays Tudor Revival influences, a style that was popular during the latter part of the Interwar period and more typically employed in a residential setting. The corbelled brickwork to the gable end, the use of terracotta roof tiles, contrasting brickwork (clinker and Roman), and timber casement windows all contribute to the domestic appearance of the building. (Criterion D)

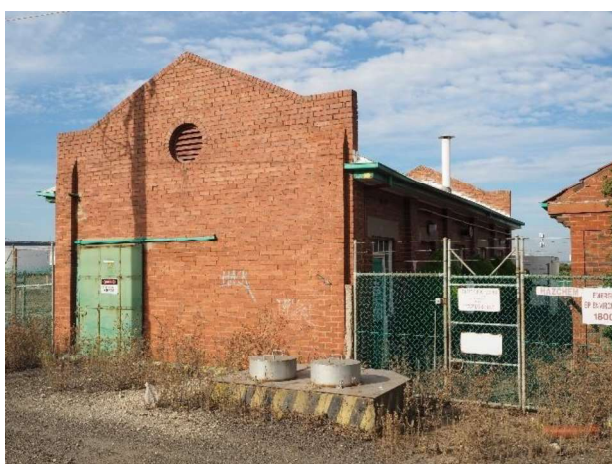
## Description

The two buildings – northern and southern - are located at the south-west corner of the former Commonwealth Oil Refineries Company site, a large roughly triangular shaped parcel of land, which is bound by Burleigh Street (north), Drake Street (west) and the former rail line (south and east). The site is largely flat and generally has wire mesh fence to the street boundary.

### Northern Utility + Office Building

The northern utility + office building (likely a valve or pumphouse) is intact. It has a rectangular footprint and its west wall sits on the Drake Street boundary.

The palette of red brick walls in stretcher bond with concrete lintels is typical of industrial buildings of the early part of the Interwar period. The building has a gable roof, clad in corrugated sheet metal clad, and eaves lined with sheeting, with a timber fascia and eaves gutters.



Northern building, south-west corner



West elevation

The narrower east and west walls terminate in a parapet with a central gable, in line with the roof. The coping has a single course of rowlock bricks.

The west/Drake Street elevation has a central oculus to the gabled end/upper part of the wall with timber louvres and a wide metal-lined, sliding door with an external rail. To the outer edge is a narrow buttress surmounted by corbelled brickwork. The

east elevation is not visible from the public realm however historical aerials show a similar appearance to that of the west elevation (circular vent and large central opening), as do recent aerials views.<sup>1</sup>

The north and south elevations are similar and are divided into five bays by brick piers. Each bay has a large rectangular window or blind niche with a rendered/concrete lintel, sills with bullnose bricks and paired terracotta vents to the lower and upper parts of the wall. The use of multi-paned steel windows (five panes high by four panes wide) is typical of industrial buildings constructed during the Interwar period. There is a horizontally pivoting section to the centre of the window, which are not common (as hoppers were the standard openable/ventilating panes). The windows have panes with safety glass (albeit some panes have been replaced).



Northern building, north elevation



Blind niche and steel framed window

The western most bay on the south elevation has a door with timber boards. In the middle bay, above the window is a large pipe and a metal flue.

### Southern Office Building

The southern office building is set back by a couple of metres from the Drake Street boundary. It has red brick walls, also in stretcher bond, and a gable roof clad in terracotta tiles.

The southern building incorporates some Tudor Revival style influences and use of brickwork that was popular during the latter part of the Interwar period, especially in the residential sphere. The gabled roof has contrasting clinker brickwork to the upper course of the gable end, the corbelling, and a panel in the blind niche in the west elevation. There is also a panel of Roman bricks with a clinker brick band/lintel, which is partly visible.

The windows are timber casement type, each with three panes. On the north elevation is a timber door with a glass pane and highlight window above.

<sup>1</sup> These elements are evident in a 1939 historic photo of the building. It is assumed these original elements remain. (Source: SLV, Aerial photograph dated February 1939, Charles D Pratt, H91.160/1764).





Southern building, north-west corner



Clinker brick elements

## History

The suburb of Spotswood covers the unceded Country of the Yalukit-Willam people of the Kulin nation, who maintain an ongoing cultural connection to the land. This low-lying, riverside environment was alienated from the late 1830s and the early crown Allotments are evident on the below Parish Plan

### APOC and COR

In 1901 a concession was signed between British businessman William Knox D'Arcy and Mozzafar al-Din, Shah of Persia, permitting D'Arcy exclusive rights to explore for oil in the Middle East. In 1908 the first significant find in commercial quantities was discovered in the Khuzestan Province, south-west of Persia (now Iran). Subsequently, the Anglo-Persian Oil Company (APOC - now BP) was founded the following year as a subsidiary of the Burmah Oil Company. By 1912 an oil refinery at Abadan Island in the south-west of Iran was in operation.

In Australia, the petroleum industry emerged during the early twentieth century as kerosene and oil became important for everyday domestic and industrial use.<sup>2</sup> In 1901 the Shell Company established a bulk handling facility for imported fuel oil, kerosene and petrol at Williamstown.<sup>3</sup> Petrol refining was carried out overseas and imported in a refined state and distributed from local depots.

In 1920 Australian oil company, Commonwealth Oil Refineries Ltd (COR) was formed as a joint venture between the Commonwealth Government and APOC. The COR had a nominal capital of £500,000 in which the Government retained a controlling interest.<sup>4</sup> The establishment of a petrochemical industry in Australia would replace overseas imports with locally produced commodities and reduce Australia's import bill.

The purpose of the COR would be to erect plant in Australia for the purposes of refining crude oil either obtained in Australia or abroad.<sup>5</sup> In 1924 a repository tank farm and pumping operations at Spotswood (subject site) was built to assist the oil refinery at Altona North, the first refinery in Australia.

<sup>2</sup> *Hobsons Bay Heritage Study, Vol. 1b, Thematic Environmental History*, October 2003

<sup>3</sup> [https://en.wikipedia.org/wiki/Shell\\_Australia](https://en.wikipedia.org/wiki/Shell_Australia). In 1905 the British Imperial Oil Company Ltd., was established as a joint venture between the Shell Transport and Trading Company and the Royal Dutch Petroleum Company. It was renamed the Shell Company of Australia in 1926. In 2014 *Shell* sold its Geelong refinery and Australian petrol stations to Dutch company *Vitol*. The latter operate as *Viva Energy* whilst maintaining the *Shell* branding.

<sup>4</sup> 'Commonwealth Oil Refineries', *Argus*, 13 July 1923, p7

<sup>5</sup> 'Commonwealth Oil Works. Refining Plant About to Start,' *Age*, 13 March 1924, p8. As part of the agreement, up to 100,000 tons of crude oil would be shipped annually from Iran.

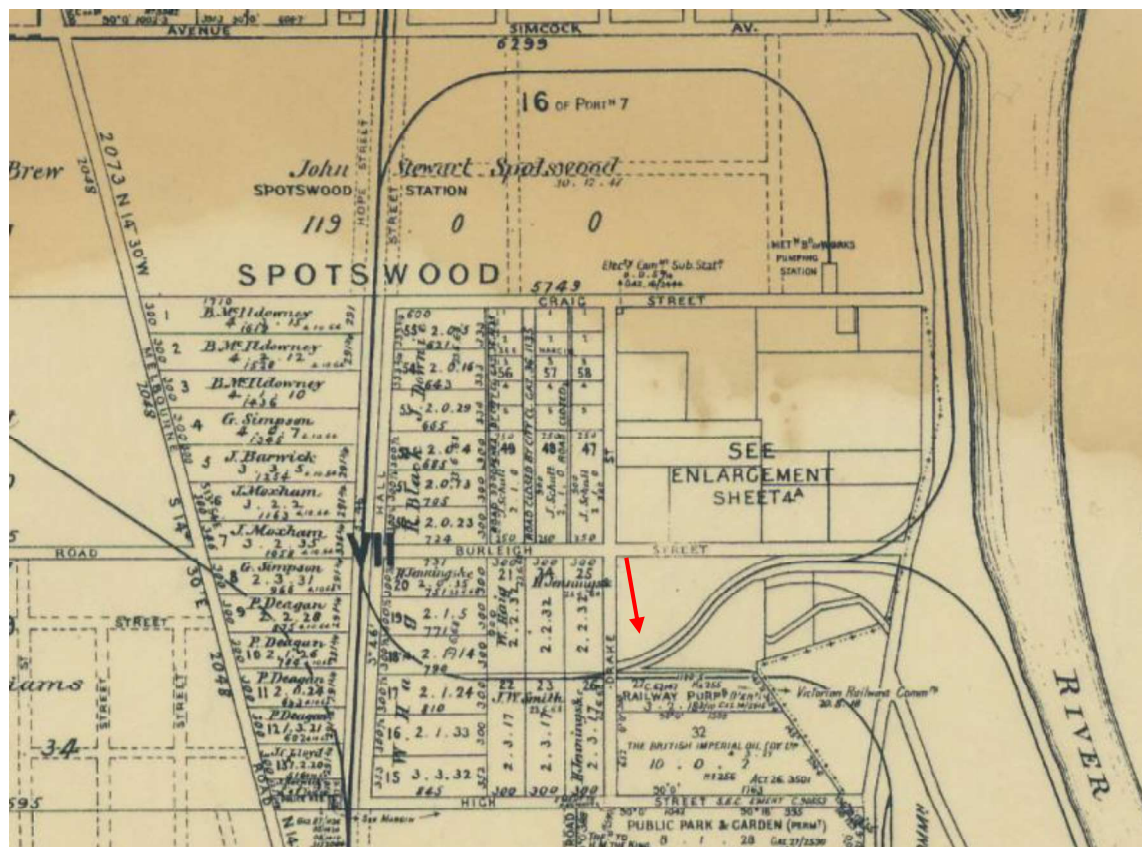
### Site-specific

In 1841 John Stewart Spotswood purchased 119 acres of Crown land in the Parish of Cut-Paw Paw for grazing cattle and the quarrying of basalt. Spotswood's family name was eventually bestowed upon the area, replacing the earlier usage of Edom and Spottiswoode.<sup>6</sup>

The subject site derives from Section 7 of the Parish Plan, situated to the south of Spotswood's holdings. During the late 19<sup>th</sup> century much of the land along the river was the focus of industrial and residential development. The allotments closest to the river were configured into larger allotments for industrial purposes and the railway was extended eastwards, establishing the boundaries of the subject site (an area of just over two hectares).<sup>7</sup>

The abundance of flat land and proximity to the rail line and port was desirable for new as well as established businesses who required large sections of land or were seeking to expand. In 1890 the Melbourne Glass Bottle Works relocated from their South Melbourne premise to Spotswood erecting a large manufacturing plant. Between 1893 and 1897 the Spotswood Pumping Station was constructed by the Melbourne Metropolitan Board of Works to facilitate Melbourne's sewerage system.<sup>8</sup>

The Parish Plan of Cut-Paw Paw shows the roughly triangular parcel of land associated with the subject site which is bounded by Burleigh and Drake streets and the railway.<sup>9</sup> At the intersection of Drake and High streets is large ten-acre allotment owned by the British Imperial Oil Company Ltd.



Parish Plan of Cut Paw-Paw, Sheet 4, C345(19). The subject site is indicated (red arrow). On the north side of Craig Street is the Pumping Station and on the north side of High Street is the British Imperial Oil Company.

In 1922 the COR acquired the subject site bounded by Burleigh and Drake streets for the purposes of developing a bulk storage depot for crude oil. The oil would be shipped from Iran to Melbourne by steamer and stored in steel tanks at the subject site

<sup>6</sup> Spotswood Railway Station (1878) was known as Edom until 1881, then Spottiswoode. In 1905, it was renamed, Spotswood.

<sup>7</sup> Title Plan, TP 302945S,

<sup>8</sup> 'Victorian Places, Spotswood', [www.victorianplaces.com.au/spotswood](http://www.victorianplaces.com.au/spotswood), 2015. The basalt terrain of the Spotswood area provided a stable foundation

<sup>9</sup> Cut Paw-Paw Parish Plan, Sheet 4, C345(19)

before being pumped along a pipeline from the site to a storage tank depot alongside the company's refinery near Altona North.<sup>10</sup>

By October 1923 pipelines, railways and the construction of two steel storage tanks had commenced at the subject site.<sup>11</sup> A new purpose-built company wharf at Spotswood (Berth No. 4) was constructed by the Melbourne Harbour Trust. This included an Officers and Mens Quarters built to the west of Berth no. 4.<sup>12</sup>

### Northern Utility + Office Building

The earlier of the two subject buildings at the site was constructed in 1923-24 during the initial stage of the site's development. The utility building (a valve or pump house) was integral to the operations at the site and would have been multi-functional, serving an administrative role as the only building on the site for about seven years.<sup>13</sup> It also contained some electrical equipment and/or switchboard.

In March 1924 the first shipment of crude oil arrived in Melbourne via tank steamer *British Rose*.<sup>14</sup> A party of about thirty individuals witnessed the pumping operations at Spotswood, the first of its kind in Australia. Crude oil was pumped at a rate of 500 tonnes an hour into the largest store tank at the subject site, which had the capacity to hold 10,000 tons of oil.<sup>15</sup> It was subsequently pumped from the tank to the Altona North refinery.

This process involved electrically driven pumps which delivered the oil in eight-inch pipes along an underground pipeline 3 ½ miles in length to the refinery.<sup>16</sup> The smaller tank at the subject site served as a repository tank 'into which fuel oil for the refinery may be pumped for delivery to vessels at the oil wharf.'<sup>17</sup>

At the Altona North refinery, the crude oil was distilled and 'the various components drawn off as vapor as they reach their boiling point.'<sup>18</sup> Benzine, kerosene and residual, or fuel oil was produced which could then be used in Diesel engines or steam boilers.<sup>19</sup> The refinery had the capacity to accommodate 15,000 tonnes of crude oil and 400 tonnes of fuel oil.<sup>20</sup> The fuel oil was subsequently pumped back to the Spotswood site or the depot in Port Melbourne. There were additional distributing depots in Sydney, Newcastle, Brisbane and Adelaide.<sup>21</sup>

A 1925 aerial (however poor quality) of the subject site shows the northern utility + office building and two oil storage tanks (NP6 + NP7 - now demolished).

<sup>10</sup> Newspaper articles dating from the 1920s to the 1950s commonly refer to the Altona North refinery as situated in Laverton.

<sup>11</sup> 'Commonwealth Oil Refineries', Sydney Morning Herald, 3 October 1923, p15. The storage tanks (NP6 and NP7) at 39-81 Burleigh Street, Spotswood were removed in 2019 (Nearmap.com)

<sup>12</sup> Tender Notice, *Argus*, 10 November 1923, p14. It is not known if the Officers and Mens Quarters survive.

<sup>13</sup> The building would have accommodated a variety of technical and administrative functions needed to fulfil the extensive daily operations at the site. The Atlantic Oil Company's Plant at Spotswood initially consisted of 'a brick and steel storehouse for case handling and distribution; brick office buildings; garage to house the road trucks (steel frame), and electrically driven pumps in the main pump house adjacent to the tanks.' ('Oil Company's Plant, 29 February 1928, p14)

<sup>14</sup> 'Commonwealth Oil Refineries', Brisbane Courier, 8 March 1924, p4

<sup>15</sup> 'Commonwealth Oil Works. Refining Plant About to Start', *Age*, 13 March 1924, p8

<sup>16</sup> 'Melbourne's Oil Plant. First Refined Products This Month', *Herald*, 5 April 1924, p8; *Herald*, 7 March 1924, p5

<sup>17</sup> 'Commonwealth Oil Works. Refining Plant About to Start', *Age*, 13 March 1924, p8

<sup>18</sup> 'Oil Refining becomes a giant of industry', 2 December 1954, p10

<sup>19</sup> 'Oil Refineries. 100,000 Tons to be Treated Annually', *Northern Star*, 18 March 1924, p3

<sup>20</sup> 'Melbourne's Oil Plant. First Refined Products This Month', *Herald*, 5 April 1924, p8

<sup>21</sup> 'Commonwealth Oil Works. Refining Plant About to Start', *Age*, 13 March 1924, p8

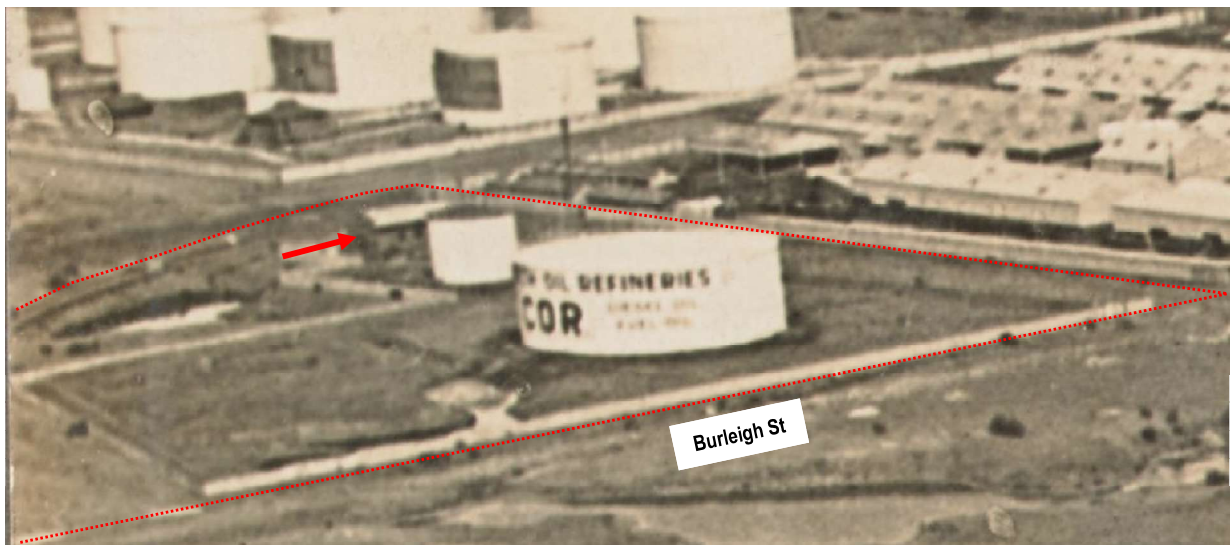




1925 aerial, from west, with the northern building highlighted  
(Source: Oil and Australia, *Herald*, 16 September 1925, p16)

By 1926 the company's capital had increased to £750,000.<sup>22</sup> It was reported that at full capacity the Altona North refining plant would have the capability to provide about one-third of the annual consumption of commercial oil in Australia.<sup>23</sup>

A photograph dated 1930 shows that the northern building and two storage tanks continued to be the only structures at the COR site.



Aerial Photograph dated 1930. The first subject building is indicated.  
'Aerial view of the M.M.B.W. pumping station at Spotswood, Commonwealth Oil Refineries and Australian Glass Manufacturers', Shaw-Ross Aviation Co. (Source: SLV, H29860)

A second historic photograph likely dating circa 1930 shows the south-east corner of the northern building. The parapet and gabled vent on the east elevation is evident.

<sup>22</sup> 'Victorian Industries. Story of Enterprise', *Argus*, 9 September 1926, p26

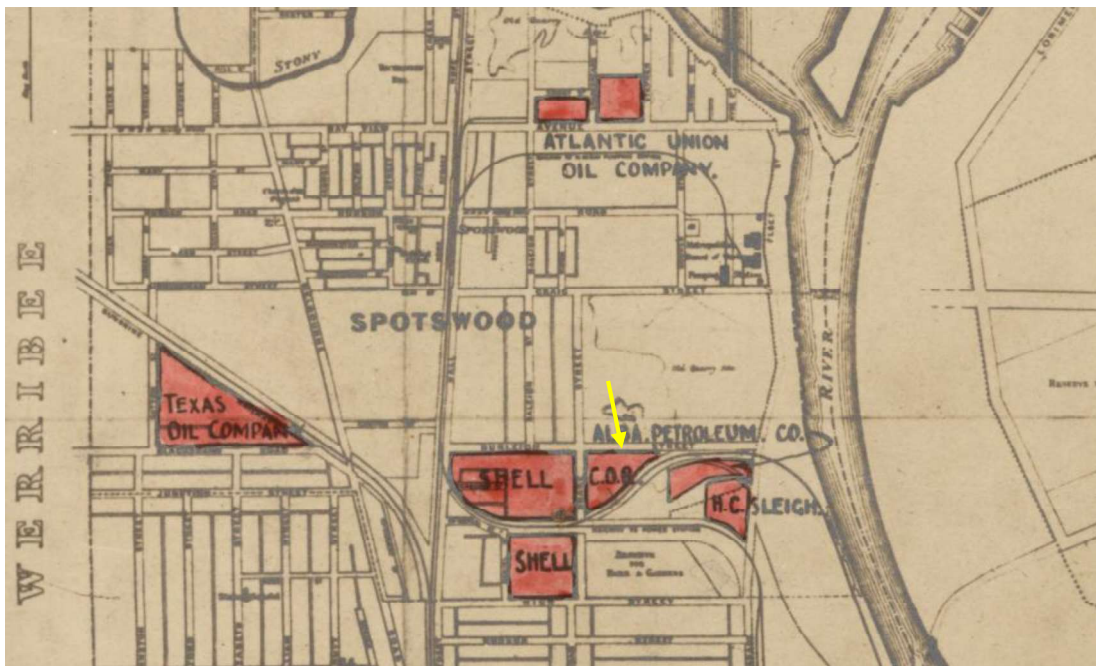
<sup>23</sup> 'Our Latest Industry, Commonwealth Oil Works,' *Smith's Weekly*, 10 May 1924, p29



Circa 1925 - 1932<sup>24</sup> showing the south-east corner of the building and bulk storage tanks NP6 and NP7  
(Source: SLV, Charles Daniel Pratt, H91.160/252)

In 1932 extensive changes were made at the subject site to reflect the latest improvements in oil refining and to match the efficiency of overseas plants.<sup>25</sup> An additional five oil storage tanks were erected and equipment for the bulk handling of petrol between the depots in Spotswood and the refinery supplied. The COR reportedly carried out the works ahead of schedule as a contribution towards the high levels of unemployment at the time. Materials were locally sourced where possible.

A map of Spotswood in the early 1930s shows the subject site as one of six major oil companies in the vicinity of the port. Other oil companies included the Texas Oil Co., Atlantic Union Oil Co., Shell Oil Co., and H C Sleigh Oil Co. (Golden Fleece).<sup>26</sup>



Extract from a map showing location of oil companies in Spotswood, early 1930s – the COR site indicated by the yellow arrow  
(Source: Melbourne Harbour Trust Collection/12, NLA, <http://nla.gov.au/nla.obj-2141160643>)

<sup>24</sup> The photograph is labelled 'Ships berthed in Yarra River, Commonwealth Oil Refinery in background' and is dated ca 1925 – ca. 1946. It is however known it predates the expansion of the subject site which commenced in 1932.

<sup>25</sup> 'New Refining Unit, Local Material Used,' 2 February 1932, p3

<sup>26</sup> Early 1930s. Map showing location of oil companies in Port of Melbourne, Williamstown, Spotswood and Yarraville, Victoria]. <https://nla.gov.au/nla.obj-2141160643>



A photograph dated 1939 shows the subject site as it continued to be developed. Five additional storage tanks and extensive network of overground pipes contained by bund retaining walls have been installed.<sup>27</sup> In the south-west corner of the site is the extant brick utility + office building constructed in 1924. Pipes have been fixed to the south elevation, this is likely due to the increased capacity and improvements at the site.

A second utility building (now demolished) – a brick pumphouse – was built to the east of the extant 1924 building to supplement the pumping operations. A series of pipes connects the pumphouse to the various storage tanks. The brick building had a rectangular footprint, gabled roof, and two windows on the east elevation.<sup>28</sup>



Aerial photograph dated February 1939 (Charles D Pratt), view from the east. The 1924 building is indicated. (Source: State Library of Victoria, H91.160/1764)



1924 building (red arrow) and demolished brick pumphouse to the east side.

In 1937 the new modern designed tanker 'British Destiny' completed its first voyage from Abadan to Spotswood. The tanker was one of 18 new tankers added to the fleet which had a combined cost of £3,000,000. The new tankers were constructed in British

<sup>27</sup> A bund is an embankment or wall surrounding an industrial fuel tank.

<sup>28</sup> The brick building remains and is not readily visible from the public realm. (Source: Nearmap, 2021)

shipyards and were each designed to carry about 12,250 tonnes.<sup>29</sup> The re-arranged tanks system allowed 'greater flexibility in carrying and manipulating separate types of petroleum products.'<sup>30</sup>

### Southern Office Building

The second of the subject buildings was erected in 1940, immediately to the south of the original building. In May 1940 a tender notice for the construction of a brick office building measuring 31 feet x 22 feet at the subject site was advertised. The office building was to be erected at Spotswood and would facilitate the ongoing operations at the site during WWII.<sup>31</sup>



1945 aerial showing both the 1924 building (north) and the 1940 building (south).  
(Source: Landata, Project No. 5, Run 21, Frame 58566)

### Post-WWII

A COR advertisement post-WWII shows the company marketed motor spirit, lamp kerosene, power kerosene, light diesel, diesel oils and fuel and bunker oils.

By 1950 the site continued to operate as an import terminal and storage facility for crude oil.<sup>32</sup> A fourth brick building was erected in the early 1950s to the north of the 1924 building.

<sup>29</sup> 'Modern Oil Tankers. Maiden Voyage of 'British Destiny'. *Canberra Times*, 25 February 1937, p6

<sup>30</sup> 'Modern Oil Tankers. Maiden Voyage of 'British Destiny'. *Canberra Times*, 25 February 1937, p6

<sup>31</sup> Tender Notice, Contract No. 321, *Age*, 11 May 1940, p32

<sup>32</sup> Hobsons Bay Heritage Study (Amended 2017) - Commonwealth Oil Refinery Co. Tank Farm (Former) – NP6 and NP7 storage tanks (HO49)



1946 Advertisement for The Commonwealth Oil Refineries Limited.  
(Source: Examiner, 19 August 1946, p3)

In 1952 the Commonwealth sold its shares in COR to the Anglo-Persian Oil Company which changed its name to British Petroleum in 1954. In 1955 a new £40,000,000 refining plant at Kwinana in Western Australia was opened and the Altona North refinery was closed. Operations were subsequently combined with Mobil at its Yarraville terminal as part of a broader restructuring of the oil-refining industry and expansion in Australia. At the time of its closure the Altona North refinery was reported to have distilled about 1,000,000 tons of crude oil annually.

### Recent Development

From the 1990s, the site was used on a casual basis for storage of product and in 1999 the storage tanks were owned by BP.<sup>33</sup>

A 2014 image from the south-west corner of the subject site shows the two subject brick buildings in the foreground, the 1930s brick pumphouse and the 1950s asbestos building. Beyond this, are the oil repository tanks which were demolished in 2019.<sup>34</sup>



Street view (2014) showing the two subject buildings, the 1930s brick pumphouse and 1950s asbestos building. The storage tanks have since been demolished. (Source: Google)

<sup>33</sup> Hobsons Bay Heritage Study (Amended 2017) - Commonwealth Oil Refinery Co. Tank Farm (Former) – NP6 and NP7 storage tanks (HO49); Commonwealth Oil Refinery Complex (Former) (HO303)

<sup>34</sup> Nearmap.com



## Thematic Context

Graeme Butler & Associates, *Altona, Laverton & Newport Districts Heritage Study, Stage Two; Volume Two, Environmental History*, 2000:

- Theme 3: Developing Local, Regional and National Economies – subtheme ‘Petroleum and petro-chemicals’ (3.4.7)

## Comparative Analysis

Spotswood, east of the Williamstown railway line, has been a predominantly industrial area since the late 19<sup>th</sup> century. The area near the river was once occupied by large oil/petrochemical companies such as Atlantic Union Oil Co., Texas Oil Co., and H C Sleigh (Golden Fleece) however all three sites have since been cleared of buildings.

Only a few petroleum-related buildings from the oil/petrochemical industry (late 1910s to the Interwar years) survive at Spotswood. The *Shell Oil Complex* (HO47) on the south side of Burleigh Street, Spotswood retains a valve house and boiler house constructed c.1914-40 and a pair of gable-roofed, corrugated metal packing sheds that date from the 1920s and 1930s.<sup>35</sup>

At the northern end of the Shell complex at the intersection of Drake and Burleigh streets is a large industrial building with red brick walls (east and south sides) and a central pediment to Burleigh Street (1936-39).



Packing Sheds at *Shell Oil complex* (HO49) (Butler, 2000)



Former Shell Newport Terminal (North Group) - Building One

Other buildings include a brick administrative office (c.1921) and timber tramway bridge at the former COR refinery site in Altona North (included in HO303), however all other buildings at the site have been removed.

It is not known if Officers & Mens Quarters constructed by COR to the west of Berth no.4 at Spotswood during the 1920s survive.

Accordingly, the subject buildings are rare and intact examples of oil/petrochemical related buildings constructed during the Interwar period. Few buildings from this phase of development at Spotswood survive.

## Heritage Overlay Schedule Controls

External Paint Controls	No
Internal Alteration Controls	No
Tree Controls	No
Outbuildings and/or Fences	No
Prohibited Use	No
Aboriginal Place	No

## Extent of Heritage Overlay

The proposed extent of the heritage overlay would be associated with Allotment 28 Section 7 Parish of Cut Paw Paw. The extent of the overlay is outlined approximately below, which aligns with the south and west boundaries and extends five metres to the north and east of the buildings.

<sup>35</sup> Hobsons Bay Heritage Study (Amended 2017) – Shell Oil Complex (HO47)



Recommended extent of heritage overlay with dashed line indicating 5m curtilage  
(Source: Nearmap, 1 September 2021)