



**Number 148**

**"the ship comes first"**

**Mar 2015**

**The Newsletter of the Barque *Polly Woodside* Volunteers Association Inc.**

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**Chairman's Address at the AGM**

Yet another year has passed by for the PWVA and our beautiful ship. It has been a year of accomplishments, unfortunately with some disappointments, but look on the bright side, we the volunteers, are still a dedicated group striving to bring the ship back to her former glory.

Things are pretty quiet at present. Only 5 Polly volunteers are getting down to the ship on the Tuesdays. Regular members are Peter Allen, Richard Barber, Don Knowles, John Maxwell, Roger Wilson, me, with Trevor Dove from BMT. Sorry Roger! I omitted your name in the December Wave. It would be great if our numbers could swell, so we are looking forward to seeing you.

As you may be aware, with the changes that have been made by the National Trust to Polly's access arrangements, the ship is now only open on weekends to the public, except for school groups. During holiday periods, December, January and school holidays, when the ship is open every day, we are given a compulsory break from mid-December late in January, so the entertainment can be run on site. These things combined, mean that as we can only work on the ship Tuesdays from 9am to 2pm, we do not get as many things done as we would like.

**The ship:** Work carried out on Polly this year has been necessary routine maintenance – not the inspiring or job-satisfaction type. The port side for'r'd bollard was removed with great difficulty, in order to renew its timber base. Tor certainly made sure it was there to stay. by encasing both timber and bolts in bitumen. Now they are re-installed, we hope they will last as long as the original one did. The Port side boat is now shining with gloss white paint inside and out, thanks to Don, John, Peter and Richard, with its canvas cover beautifully repaired by Roger. With the falls checked, and the block sheaves lubricated, and our plan to get

the boat in the water to the falls conceived – the test will come next Tuesday. Stop Press:- The boat is up on the chocks. Naturally all went perfectly, with no problems at all, thanks to the 'Magnificent Seven'. Like the old days!

The stairs to the fore peak and quarterdeck have been removed, overhauled, oiled and replaced. Volunteers from the ANZ Bank (groups from approximately 6 to 20) have been on site on four occasions and painted the deckhouse, hatch coamings, bulwarks and scuppers, as well as the ship's hull on the 'tweendeck. One group removed the port side mizzen fife rail, cleaned and painted the plinth, replaced and oiled the fife rail, and coiled the lines all in a few hours they were on site. A great effort for people from an office environment. Works to be tackled this year include replacement of some of the margin boards by Ferdie with volunteers providing part of the labour, replacement of part of the deckhouse roof canvas, which has deteriorated, and the painting of the starboard ship's boat on the boatdeck. The mizzen gaff, fore't'gallant yard, ratlines, many blocks of the running rigging as well the painting of the hull are all in need of attention, but are sadly beyond the scope of the dwindling group that attend each Tuesday.

**The Signal Mast** is looking great, has not had a single flag flown from it.

**'The Volunteer Plaques Memorial'** My son Mark is coming to Polly has designed and is constructing the 'Volunteer Plaques Memorial'. The working design places the plaques on a background resembling a ship's deck, which will be surrounded by a capstan shaped frame. When completed it will be mounted in the Interpretive Centre. There have been many ideas considered and rejected since the first design, and then Mark came up with this new approach. Members at the Christmas lunch were impressed, so hopefully you attending this AGM will be also. On completion, the plaques will be displayed in the 'Ship Restoration' display area of the Interpretive Centre, where we will organise a 'Re-dedication Ceremony' after its installation.

Our thanks to Mark for taking on this project.

**The Pump House**, in recent months has seen a continuation of usually monthly visits to the Pump House by Engineering Heritage members, Owen and Miles, and of course Derek. they have continued their conservation and maintenance efforts, including lubrication of the engines, plus some painting of the staircases leading down into the pit and the catwalk around the cylinders of the engines.

The Heritage Recognition Ceremony at the Pump House on 27<sup>th</sup> November was a great success. It was hosted by Engineers Australia and their special interest group, Engineering Heritage Victoria, plus the Department of State Development, Business and State Innovation. Six interpretation panels in the Pump House were unveiled – they provide quite a lot of information about the history of the Dry Dock and the Pump House. They are all visible through the glass walls. A great deal of time was spent off-site researching the material for the panels. We know you will find them of interest, when you see them.

It was most gratifying that some descendants of the Orr and Robison families could attend, in addition to Alan and Bill Brown, sons of Tom Brown, who was the Engineer at the Pump House in the 1950's and later the Manager of Duke and Orr's Dry Dock until his retirement in 1969.

Thanks Derek – all improvements in the Pump House are thanks to you.

**Joint meetings** with PWVA committee, National Trust and BMT are to recommence soon, thus keeping the lines of communication open.

**The committee:** Finally, I would like to give special thanks to these dedicated people, without whom we couldn't have progressed as far as we have:-.

Ralph McDonell, Vice Chairman, can't be with us in body, but certainly in spirit and emails.

John Wroe, Treasurer, I fall back on him more and more, and he never hesitates to give his support.

Jenny Hunter, Secretary, Efficient, dedicated and doesn't hesitate to pull us back in line when we meander off course, and I feel she also keeps us motivated.

Roger Wilson, always there with practical advice and negotiation skills. His seaman's knowledge and expertise are invaluable,

Don Knowles – whose expertise in woodworking and ability to organise jobs, is a great asset to the maintenance and restoration of the ship.

Neville Keown, Always willing to help, but a little hampered at the moment. Neville has joined Betty Crompton as one of our ninety year youngs

Also, you the members of the PWVA for your continuing support.

Unfortunately again, I have to finish on a sad note. In 2014, we lost George Hogben, a long time volunteer for 29 years who will always be remembered for his contributions to Polly.

Captain Ralph McDonnell's Testimonial in June's 'Wave', I feel, summed up our feelings for George.

Thank you.

### ***The ship comes first.***

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#### **FROM SLOPPE TO SLOP-CHEST TO SHOP**

On most long distance sailing ships, the master ran a small shop which was opened at regular intervals – generally on Saturday. The stock-in-trade for convenience sake was kept in a small room, eg. The lazarette, or in a sizable chest and invariably carried clothing to replace that worn out during the voyage which in those days could last months.

For centuries seamen's clothes have been referred to as 'slops', not in any derogatory sense but arising from an old English word 'sloppe', which meant the characteristic baggy breeches worn at that period by seafarers. Eventually the word slop was used to describe any seaman's clothing and so arose the slop-chest.

The first recorded use of a slop-chest appears in the navy in 1691, but the practice must have originated long before this and as, particularly in medieval days, there was not much difference between the 'Fighting Navy' and the 'Merchant Navy', it would be surprising if something similar was not in use in the latter.

However, be that as it may, slop-chests were well established on nineteenth century sailing ships. 'Sea prices' was used to explain the exorbitant charges for goods – there being no competition, it was a matter of take it or leave it.

Of course it was not only clothes that were carried but everything a seaman might need at sea tobacco, pipes, cigarettes, knives etc. – anything but grog. I imagine it would be a nice little sideline for the skipper.

As ships became more civilised the chief steward or others took over this activity from the master. In fact, in one cargo ship, the well-stocked shop was not even thought of as the slop-chest; it was run by one of the crew, and the prices charged were most reasonable.

**We are very sad to announce the death of John Yuncken the first member of the PWVA.**

**John Yuncken 28<sup>th</sup> November 1930 to 28<sup>th</sup> February 2015**

In 1971 John Yuncken joined the Polly Woodside Restoration Committee as the sub committee member representing Siting & Berthing. Late that year a Technical Committee was formed with John as Chairman. The committee devoted much time to the major problems of metallurgy & hull protection.

After the death in 1975 of the Master of Restoration, Captain Gerry Heyen, John Yuncken took up the task of Chairman of the Restoration Committee and doubled as the Project Executive Officer. As restoration proceeded the need for a permanent home was solved by the use of Duke's & Orr's Dry Dock. Over 100 years of use had left the timber walls vulnerable to collapse and it was John's idea to dump tons of used bricks along the dock walls.

From 1974 -75 the overall plan for the ship's restoration was implemented, monitored and controlled by the Polly Woodside Committee, whose Chairman, John Yuncken, was directly answerable to the National Trust. His example of leadership helped to preserve the ideal of the ship's restoration back to her former glory. Known affectionately as 'Chairman John' he carried a crushing responsibility with humour, Edwardian grace, and high competence. His contribution to the work is incalculable. It has ranged from sparking the start of the organisation, of physical work, to designing the layout of the converted dry dock and park. As executive officer, he was an ideas man of action.



### **Polly Woodside Volunteers Association's Tribute to John Yuncken**

John Yuncken

a.k.a. Chairman John

PWVA Member No 68.01

Most senior member of PWVA

37 years service to Polly Woodside.

Beginning in the 1960's, under the chairmanship of Dr. Graeme Robertson, John Yuncken served in various capacities – Chairman of the 'Siting and Berth Construction Sub-Committee'; Chairman of the 'Technical' Sub-Committee (involving much work on the major problems of metallurgy, hull protection and structural work); Executive Officer to the Polly Woodside Committee and finally following the death of Dr. Graeme Robertson in 1975, as Chairman and Executive Officer. Following Captain Heyen's death in 1980, John had the additional responsibility for detailed design work on the restoration of the ship.

But, as all volunteers know, this awesome list of responsibilities only represented the tip of the iceberg. Backing it up is a formidable record of utterly dedicated service to the project. Involving countless hours of work in his own time in which every detail was at his fingertips; from the research and planning for the restoration of the Polly Woodside to the organisation and design of the dry dock, the then museum and grounds. And besides this, John managed to fit in regular work at weekends as a practical volunteer, specialising in woodwork of the highest order of skill and craftsmanship, and including fitting out and furnishing of the deck-house and laying of the accommodation decks, after 'tween deck and sail locker.'

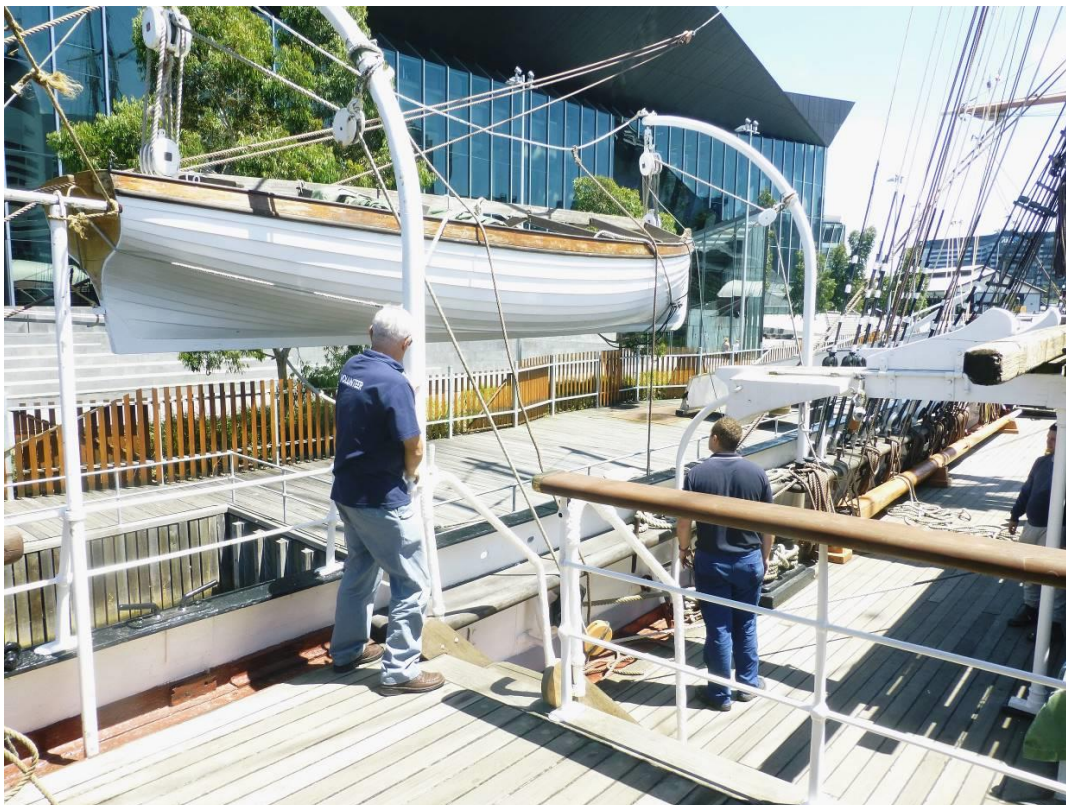
The detailed plans and specifications, as well as the supervision of the aft accommodation will forever be your living testimonial.



As Vin Durroch wrote in 1978 in his book 'Barque Polly Woodside (Rona)', 'his contribution to the work has been incalculable'.



A couple of pictures from the recently renovated ship's move back on the Polly's deck.





## Engineering Heritage Recognition Ceremony

### Duke & Orr Dry Dock Pump House

Hosted by:  
Engineers Australia  
Engineering Heritage Victoria  
Department of State Development,  
Business and Innovation

Thursday 27 November 2014



This document has been prepared as a handout for the ceremony for the recognition of the Duke & Orr Dry Dock Pump House under the Engineering Heritage Australia Heritage Recognition Program on Thursday 27 November 2014.

For more information, please visit:

[www.engineeringheritage.com.au](http://www.engineeringheritage.com.au)

[www.engineersaustralia.org.au/engineering-heritage-victoria](http://www.engineersaustralia.org.au/engineering-heritage-victoria)



November 2014

12 | Duke & Orr Dry Dock

Engineers Australia, Engineering Heritage Victoria and the Department of State Development, Business and Innovation are recognising the significance of the Duke and Orr Dry Dock Pump House with an Engineering Heritage Marker on Thursday 27 November 2014.



The pumping engine in 2011 – Image: Owen Peake

2 | Duke & Orr Dry Dock



Barque Polly Woodside in the Duke & Orr dry dock in 2010 – Image: source unknown



Steam valves on top of one of the two boilers – Image: Miles Pierce

3 | Duke & Orr Dry Dock



## Duke & Orr Pump House - A Perspective

The dry docks on the South Bank of the Yarra River in the vicinity of Normanby Road were a key part of the infrastructure to support the shipping industry in Melbourne from their establishment in 1868 until closure in 1975.

Important historical events were associated with these dry docks including major shipping accidents, two World Wars and rise to power of the Melbourne Harbour Trust.

The work carried out in these docks was characterised by being dangerous, dirty and often carried out under considerable pressure from ship owners who wanted their ship back in the water as soon as possible. The men (they were all men) who worked in these docks were a tough bunch. They got up early on freezing winter mornings and walked or cycled to the dock. They worked down in the docks, often in cold, filthy sea water for long hours scraping, cleaning, painting and repairing ships. They worked in the confined space under the keels of the ships amongst the keel blocks or on makeshift planking high up on the sides of the ships without any safety equipment except their own know-how. They handled massive baulks of timber with their bare hands.

The men developed relationships which were extremely close amongst themselves, almost always loyal to their employers who treated their skills with respect. They became, however, somewhat notorious to those outside the world of the docks.

They formed themselves into the Federated Ship Painters and Dockers Union (Painters & Dockers) in 1900 and by the time Duke's & Orr's dry dock closed in 1975 they were much feared within the criminal world. The Costigan Royal Commission connected them with 15 murders and 23 attempted murders.

4 | Duke & Orr Dry Dock

What we do know is that they were loyal to one another, supported one another's families in hard times and worked beyond the normal "call of duty" for their employers. They were strong, tough, cohesive, had a limited respect for "authority" (with good cause) and they kept the wheels of the shipping industry turning in a world which depended on shipping for almost everything. Today none of us would want to do the work which these men did cheerfully year-in and year-out.



Outside of the glass enclosure which now surrounds the Duke & Orr Pump House at the Melbourne Convention Centre – Image: Owen Peake

5 | Duke & Orr Dry Dock

## History of the Dry Docks

The first dry dock was Wright & Orr's Old completed in 1868. Captain John Hughes and Captain William Sinnott had obtained a 7 year lease of Crown Lands on the south side of the Yarra River just below Clarendon Street. Here they built a graving dock which was completed by November 1868. The dock was 250 feet (76 m) long, 55 feet (17 m) wide at the top and 40 feet (12 m) at the bottom with 16 feet (5 m) depth of water in the dock and 13.25 feet (4 m) depth over the sill at ordinary tides. The pumping machinery was manufactured by William Wright of Melbourne and consisted of a 20 inch (508 mm) centrifugal pump capable of raising 5000 gallons per minute (66,000 L/s). The details of the drive for the pump are not known however it will have been a steam engine of some kind. This machinery could empty the dock in 2½ hours.

In December 1871 Hughes and Sinnott sold out to Wright, Orr and Company, whose partners were Robert Alexander Wright, Charles Frederick Orr and George Sampson Duke. This firm traded as the Melbourne Dock Company until c1881.

The partnership changed in 1874 when George Duke left to set up his own dock company. His place in the partnership was taken by John Flett

In the 1870s widening of the river and the construction of wharves commenced in the area. This marked the beginning of severe conflict between the Melbourne Harbour Trust and the dock owners. On 1 July 1876 Wright, Orr & Co obtained a lease on additional land to the south of their existing dock on which to build a new dock however they were not prepared to vacate the old dock as they had a valid lease for it.

This led to a bizarre series of confrontations where the Melbourne Harbour Trust blocked the Wright & Orr Dock with their tug Warhawk. Wright & Orr's men responded vigorously. The dock gate was lowered to the riverbed to enable the barque Souvenir to leave the dock and the Harbour Trust then scuttled a punt filled with mud on top of the gate to prevent it being raised. The warfare raged on during the month of November 1878.

6 | Duke & Orr Dry Dock

The Melbourne Harbour Trust threatened to use explosives to force their hand until the police intervened. The Melbourne Harbour Trust managed to drive nine piles into the river bed in front of the entrance to the dock, effectively putting it out of use.

After the incident subsided written exchanges continued. Over a year later Wright, Orr & Co was compensated by the Harbour Trust by the payment of £5000 and the company gave up the dock allowing the river to be widened 12.

Meanwhile in about August 1878 the new dock, called Wright & Orr's New Dock, was completed. The dock was 330 feet (101 m) long, 60 feet (18 m) wide at the top and 46 feet (14 m) at the bottom with 17 feet (5 m) depth of water in the dock and 14.5 feet (4.4 m) depth over the sill at low water. The pumping machinery was manufactured by Robison Brothers of South Melbourne and consisted of two engines with 12 inch (305 mm) diameter cylinders supplied with steam at 75 psi (517 kPa) driving centrifugal pumps. These engines operated at 76 rpm and pumped at 50,000 gallons per minute (660,000 L/s) which could empty the dock in one hour. The first ship to be docked was the barque Cadzow Forest of 1116 tons (1134 tonnes) on 14 August 1878.

In March 1879 the Melbourne Harbour Trust tug Warhawk was back in the area again. This time as a customer! The tug was apparently allowed to enter the dock, despite its war-like actions previously and apparently came to no harm whilst in the care of the dock men.

When George Duke left Wright, Orr & Co in 1874 he obtained a seven year lease to build a dock further south again but immediately adjacent to Wright & Orr's New Dock. The dock was 310 feet (94.4 m) long, 40 feet (12.3 m) wide at the gate and 54 feet (16.5 m) at the middle with 14 feet (4.3 m) minimum depth. This dock, like the two earlier ones, was timber lined and had timber gates. The machinery was manufactured by Fulton & Co Foundry, Yarra Bank, was of 35 horsepower (26 kW) but capable of working up to 90 horsepower (67 kW). This machinery could empty the dock in less than two hours. The dock was completed in March 1875.

7 | Duke & Orr Dry Dock



Again there was conflict with the Melbourne Harbour Trust but in this case no warfare. Duke negotiated for a lease on further land to enable the dock to be extended further away from the river whilst the Harbour Trust resumed land at the front of the dock. Duke modified the dock and excavated a further 300 feet (91.5 m) at the south-eastern end and created a double dock with an intermediate gate enabling two ships to be docked at once.

By 1881 the Harbour Trust was again repudiating its lease and further restricting Duke's operations. Duke claimed compensation, was refused and took the matter to arbitration resulting in the Harbour Trust having to pay him £6250 (\$12,500) in compensation in October 1882.

The modifications to the dock to meet the Harbour Trust requirements were completed by the end of 1883. The dock remained in this form, shortened to 480 feet (146 m) until the major works early in the 20th century.

At about the turn of the century it was apparent to all concerned that larger graving docks were required. The leases of both existing docks had expired and both companies submitted plans to the government for expansion of their facilities. The government was of the view that capacity needed to be increased to accommodate ships up to 6000 tons (6096 tonnes) and docks should be a minimum of 450 feet (137 m) long.

Reconstruction of Duke's Dock started in 1901 and was completed in 1904 for a sum of £43,000 (\$86,000). Almost all the construction of the dock was timber with a mixture of redgum, bluegum, grey box and ironbark. Floor planking (under-layer) was 18 x 10 inch bluegum whilst the working surface was 12 x 4 inch (305 x 102 mm) redgum. Individual lengths of timber included two baulks of grey box 45 feet (13.7) long with a section of 2 feet (610 mm) square. The prodigious quantities of timber used are almost unimaginable today but at that time such quantities of fine, strong timber was readily available.

8 | Duke & Orr Dry Dock

At this time the machinery was upgraded to the plant currently in place. This was supplied by Robison Bros & Co of South Melbourne and included moving the machinery from the northern side of the dock to its present position south of the dock.

The engines consisted of an inverted vertical duplex tandem compound engine driving a centrifugal pump from each end of the crankshaft. The HP cylinders are uppermost and the engine is fitted with piston valves. Two boilers also made by Robison Bros & Co. The engine was reputedly capable of pumping 5.6 million gallons (21.2 ML) of water in the dock in one hour. The plant was reputedly twice as large as any other docking plant in Australia.

The dock was 520 feet (158.5 m) long, 71 feet (21.6 m) wide at the top of the gate 61 feet (18.6 m) at the bottom of the gate. Depth was 23.5 feet (7.2 m) over the sill on ordinary spring high water and 20 feet (6.1 m) at low water. This dock, like the two earlier ones, was timber lined and had timber mitre gates.

The first vessel to be docked was the 3295 ton (3348 tonne), 340 feet (103.6 m) long SS Darius on 28 March 1904.

Wright, Orr & Co closed their dock in 1907 to reconstruct it. The dock reopened in 1909.

Business was brisk during this period and agents around the world made arrangements for the dock to be used when ships visited Melbourne. During 1906/07 95 vessels were docked and in 1907/08 116 vessels were docked. Electric lighting was installed in the dock during this time to permit night time working.

During these good years at the beginning of the new century there was competition between the two adjacent docks but there was also strong co-operation. In October 1910 the two docks joined forces and formed the Duke's & Orr's Amalgamated Dry Docks Ltd. Business remained brisk during the World War I period and the early 1920s.

9 | Duke & Orr Dry Dock

The Depression reduced the need for dock facilities and in May 1932 Orr's Dock handled its last ship. The dock was kept available for some time but the structural condition of its walls continued to deteriorate and by 1934 it was abandoned and later filled in.

In 1935 further blowouts of the floor occurred at Duke's Dock and eventually they replaced the floor with a reinforced concrete slab 4.5 feet (1.37 m) thick. This upgrade enabled the dock to take heavier vessels. After the floor was upgraded the Shell tanker Clam of 7404 tons (7522 tonnes) was able to use the dock for major rudder repairs in January 1937.

In the years up to World War II business picked up due to the end of the Depression and during the War there was again brisk trade as Australia geared up for the Pacific War. Duke's Dock was now able to take ships up to the 7000-8000 ton (7112 - 8128 tonne) range.

After the War there was another revolution in shipping with the end of the coastal shipping trade and the introduction of much larger more specialised ships. The change to containerised freight and the move to special car carriers are examples of this change. Duke's Dock became too small to meet the needs of the trade.

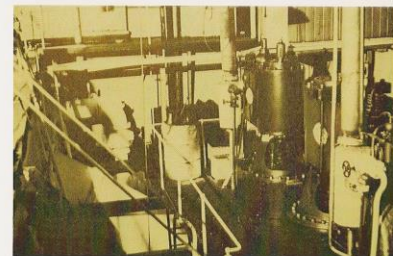
The last ship to use the Duke's Dock before commercial closure in August 1975 was the chemical carrier Sea Harrier of 4622 tons (4696 tonne) on charter to ICI Australia. She undocked at 4 pm on 25 July 1975 bringing an end to the graving dock trade in the Yarra River. The graving docks had served the maritime trade in the Yarra River for 100 years and one month.

In 1985 the firm of Duke & Orr Dry Dock Pty Ltd operated a floating dock the AJ Wagglan downstream of the Charles Grimes Bridge. This dock had a capacity of up to 10,000 tons.

10 | Duke & Orr Dry Dock

In 1977 the former Duke's & Orr's Dry Dock was ceded to the National Trust of Australia (Victoria) by the Victorian Government to accommodate the barque Polly Woodside. The length of the dock was reduced (by about one third its original length) to allow the construction of the Exhibition Centre and still provide ample space for the Polly Woodside. The dock was partially filled with 11,000 tons (11176 tonne) of bricks to reduce the volume of water in the dock and help support the wooden walls. The wooden mitre gate was later replaced by a new gate fixed along its bottom edge.

Later the Pump House including its plant and buildings were incorporated into the Melbourne Convention Centre. A huge glass box was built over the Pump House and sections of the walls of the original building were cut away to allow visitors to see inside the building.



Pumping engine 1970s – Historic image whilst the pumping station was still in operation – Image: Woodley & Botterill

11 | Duke & Orr Dry Dock