Queen's Diamond Jubilee River Pageant

Generic Passage Plan

Warning:- This generic passage plan is only for use during the Queen's Diamond Jubilee Pageant and cannot be used for any other passage at any other time.

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General Notes **This Passage Plan is applicable for the 3rd. June 2012 only**

1. **Warning Note**: This generic passage plan is provided by the Port of London Authority to assist passage planning and does not relieve masters of vessels from their responsibility for drawing up their own passage plans for their own vessel. It provides advice and guidance to be adapted by Masters to suit their own particular vessel.

2. Throughout, this passage plan is drawn up for a vessel up to 20 metres length overall, beam up to 7 metres, draught of 2.0 metres and an airdraft of 5.5 metres, all heights of tide and available air draft heights are in metres. All times given in this Passage Plan are **British Summer Time**, which = Greenwich Mean Time + 1 hour.

3. **1.0 metres safety margin should be added to the air draft calculations to allow for sea/swell and tidal surges**. You must compare these dimensions with those of your own vessel and make the necessary adjustments, paying particular attention to air draft. You are advised physically to measure your own actual air draft, this is a precaution our Port of London Authority Bridges Pilots do as a matter of course and if they feel the need to do it then less experienced mariners should similarly take this simple precaution. Space is provided on this plan to adapt it to your particular vessel.

4. **0.5 metres safety margin should be added to the draught to allow for sea/swell** where advice regarding depth of water is given.

5. The Passage Plan is applicable if the Thames Barrier is open or closed. There is a planned closure of the Thames Barrier for the duration of the Pageant. Vessels may still experience a much reduced local rise of tide. However in general any tidal effect experienced will be a weak ebb up to half a knot. Tidal height is reported every half hour at 15 and 45 minutes past the hour, by London VTS on VHF Channel 14.

6. Notwithstanding the information in para. 5. Pageant vessels should be aware that for technical or safety reasons, the planned closure of the Thames barrier may not occur. If the barrier remains open, masters will be informed through the Pageant communication system. With the barrier open normal tidal rise and fall will occur. Masters should plan for this eventuality. Tidal rates could be in excess of 2Kts. In order to assist masters with planning, a table of tidal heights is attached to this plan.

7. Each Pageant vessel will be positioned in one of three columns. The columns are allocated a colour (Gold, White or Blue). There are numerous bridges to go under along the passage route. Each column is allocated a particular arch through which it must pass, the arches are colour-coded, gold, white & blue,(only on the passage plan) and are shown on the passage plan diagrams as appropriately coloured shaded areas below the arch, also as appropriately coloured arrows below the arches on the photographs. Essentially boats with an air draft less than 4.5 metres will be allocated either gold or blue, those with an air draft greater than 4.5 metres but less than 5.5 metres will be allocated the 'white' arch, which is invariably the centre arch. Nevertheless, individual vessel masters are wholly responsible for checking and measuring their own air draft and ensuring that their vessel will fit under the bridge. Vessels are not to navigate between the river banks and moored craft and moorings as these zones are being kept clear for use by Emergency Services and Port Authority vessels.

8. All bridge arches are numbered from the North bank.

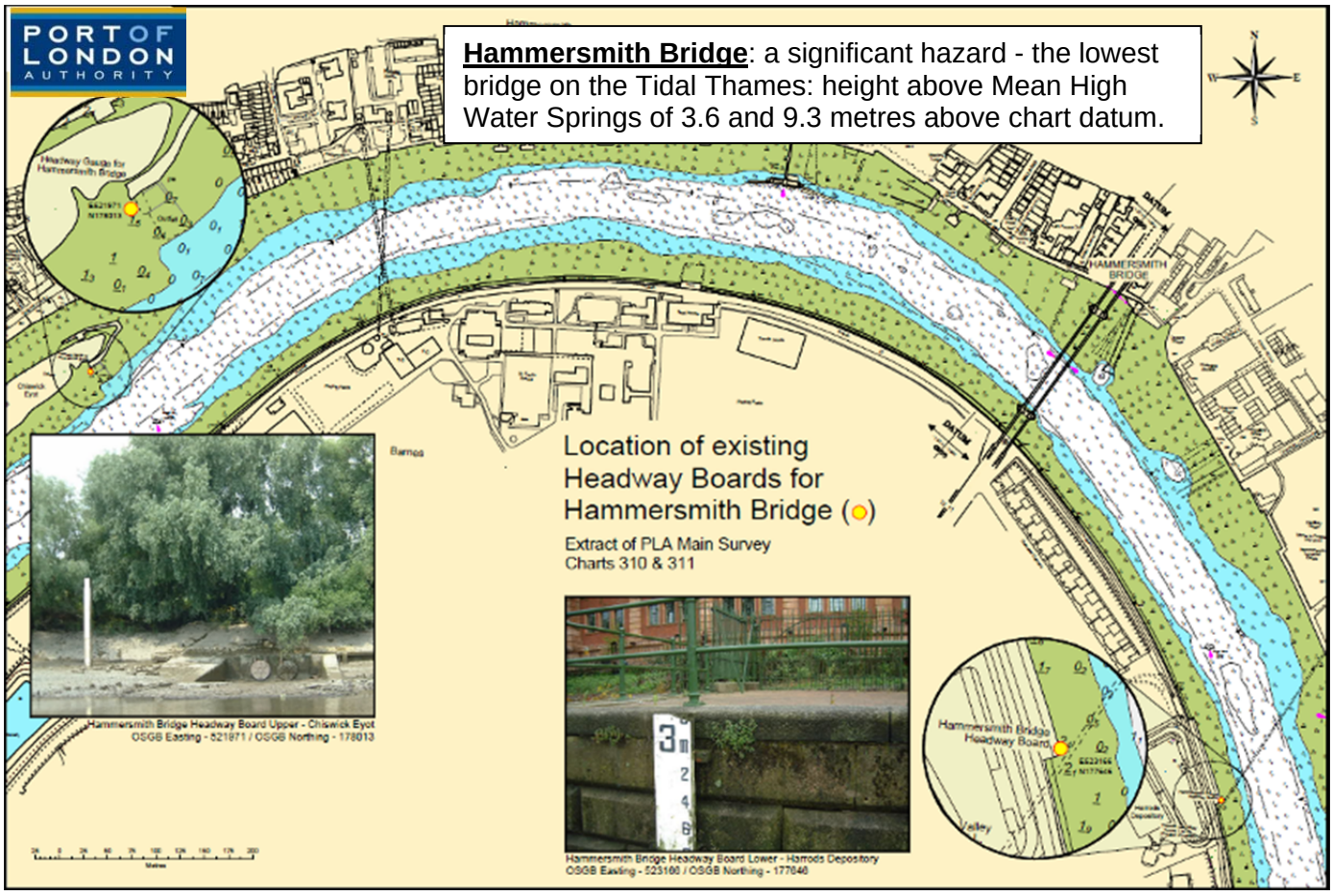
9. The chartlets are provided for clarity, to illustrate the text and provide a convenient aide-memoire, they are not navigationally accurate - the relevant navigational charts must always be consulted, ensure that the charts you use are up to date for corrections.

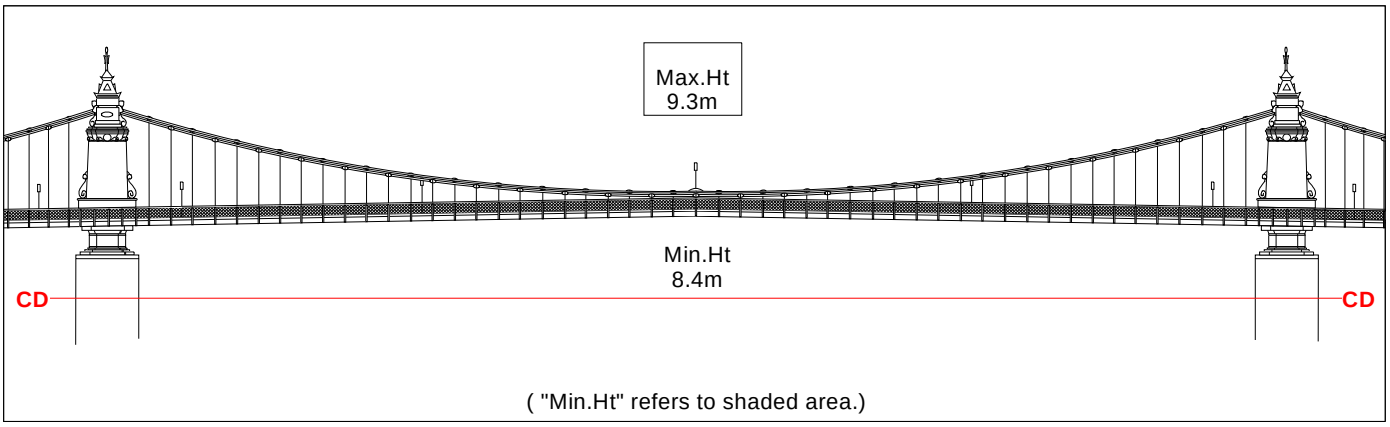
10. The red line marked 'CD' on the bridge drawings refer to 'Chart Datum', the level from which bridge height is measured.

NB. Headway clearance boards are situated on Chiswick Ait and the Harrods Depository and give a direct reading of the available air draft in the centre of the bridge.

Hammersmith Bridge	Remarks:- There is very little water on the north side. All craft should navigate centre and south.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	(-1.4)m.	1.2m.	0.0m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Hammersmith Bridge	Remarks:- There is very little water on the north side. All craft should navigate centre and south.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	8.4m.	9.3m.	8.3m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				


PORT OF LONDON AUTHORITY
Hammersmith Bridge: a significant hazard - the lowest bridge on the Tidal Thames: height above Mean High Water Springs of 3.6 and 9.3 metres above chart datum.
Location of existing Headway Boards for Hammersmith Bridge (○)
Extract of PLA Main Survey Charts 310 & 311
Hammersmith Bridge Headway Board Upper - Chiswick Eyot
OSGB Easting - 521971 / OSGB Northing - 178013
Hammersmith Bridge Headway Board Lower - Harrods Depository
OSGB Easting - 523160 / OSGB Northing - 177046
Hammersmith Bridge Headway Board
HAMMERSMITH BRIDGE


Max.Ht
9.3m
Min.Ht
8.4m
CD
CD
("Min.Ht" refers to shaded area.)


Hammersmith Bridge

Hammersmith to Putney Bridge

NB. Fulham Rail Bridge, sometimes called 'Putney Rail Bridge' may just be seen through the arches of Putney Bridge

A road bridge with five curved arches, the centre three arches are lit for navigation, in 1886 the existing wooden bridge was replaced with the current stone (granite) arched bridge designed by Sir Joseph Bazalgette.

Putney Pier, on the south shore is used by vessels at all states of the tide. The presence of rowing and sculling craft is very much in evidence in Barn Elms Reach and vessels should proceed with extreme caution.

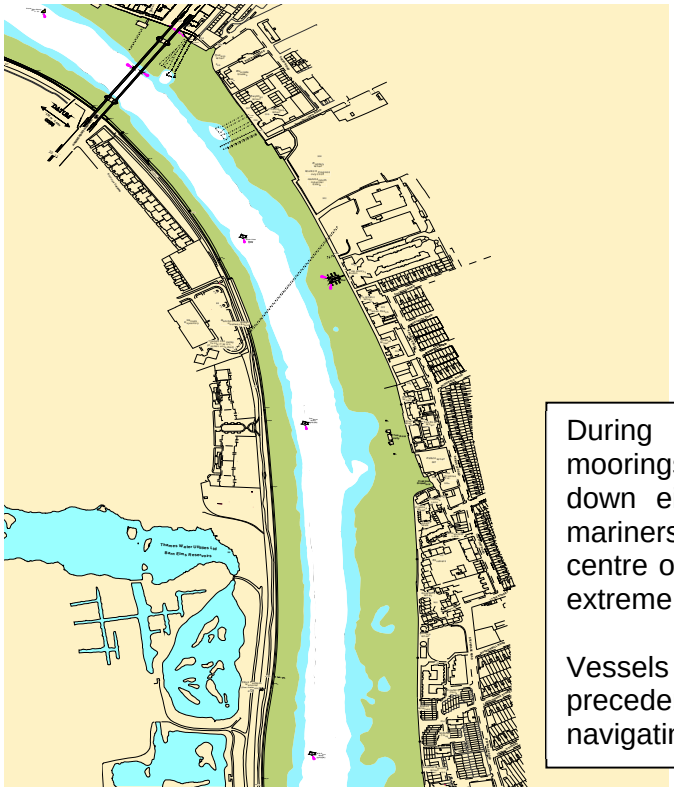
During the Jubilee weekend moorings will be laid in long lines down either side of the fairway, mariners should navigate in the centre of the channel and exercise extreme caution.

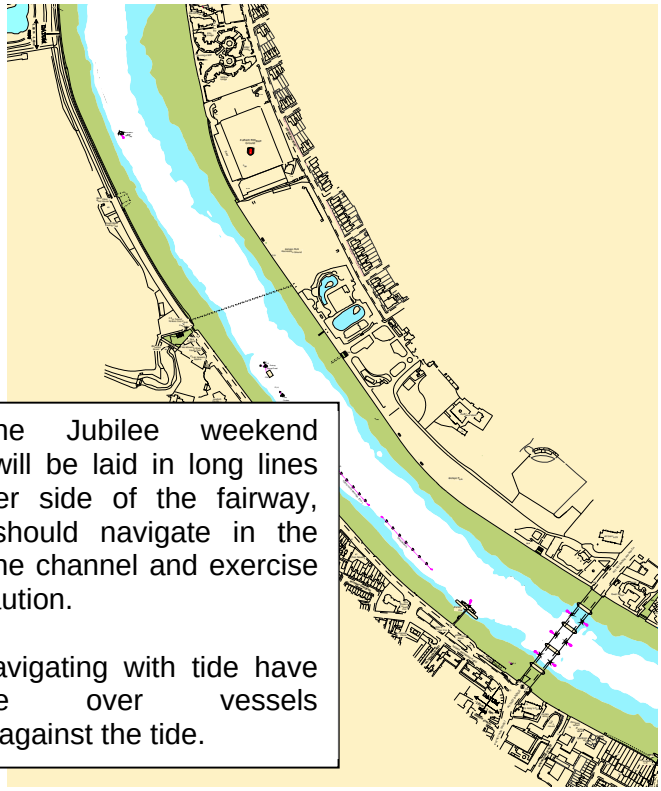
Vessels navigating with tide have precedence over vessels navigating against the tide.

Putney Bridge	Remarks:-			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	0.0m.	1.3m.	0.0m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Putney Bridge	Remarks:- The headroom is for the centre 1/3 of the arches only			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	10.0m.	10.5m.	8.8m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

Hammersmith to Putney Bridge





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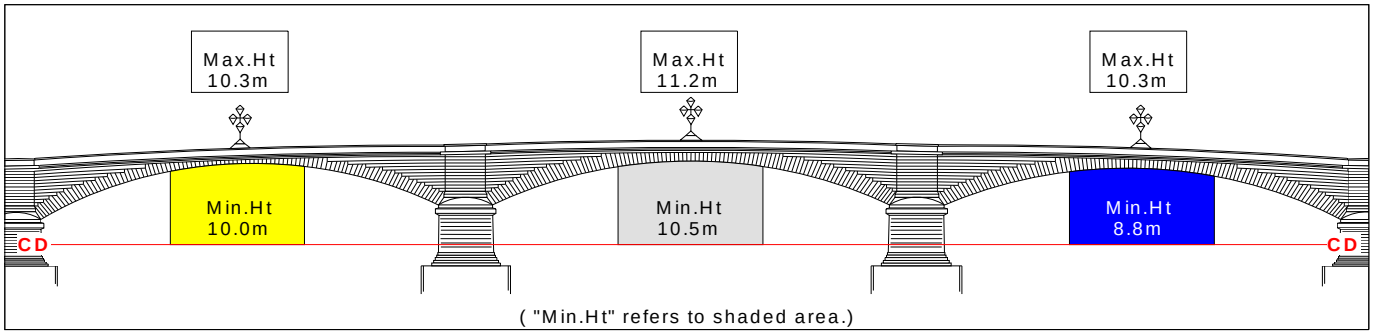
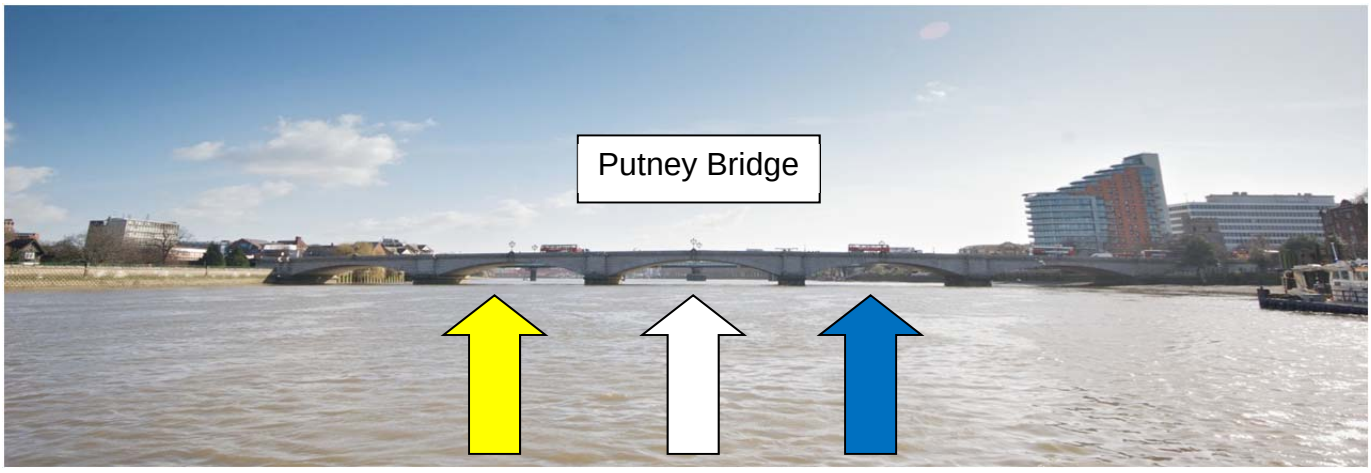




Fulham Rail Bridge	Remarks: - Deeper water to be found 70m. offshore.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	(-1.0)m.	0.5m.	(-0.2)m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Fulham Rail Bridge	Remarks: - Headroom available over whole width of arches.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	12.8m.	13.0m.	13.0m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

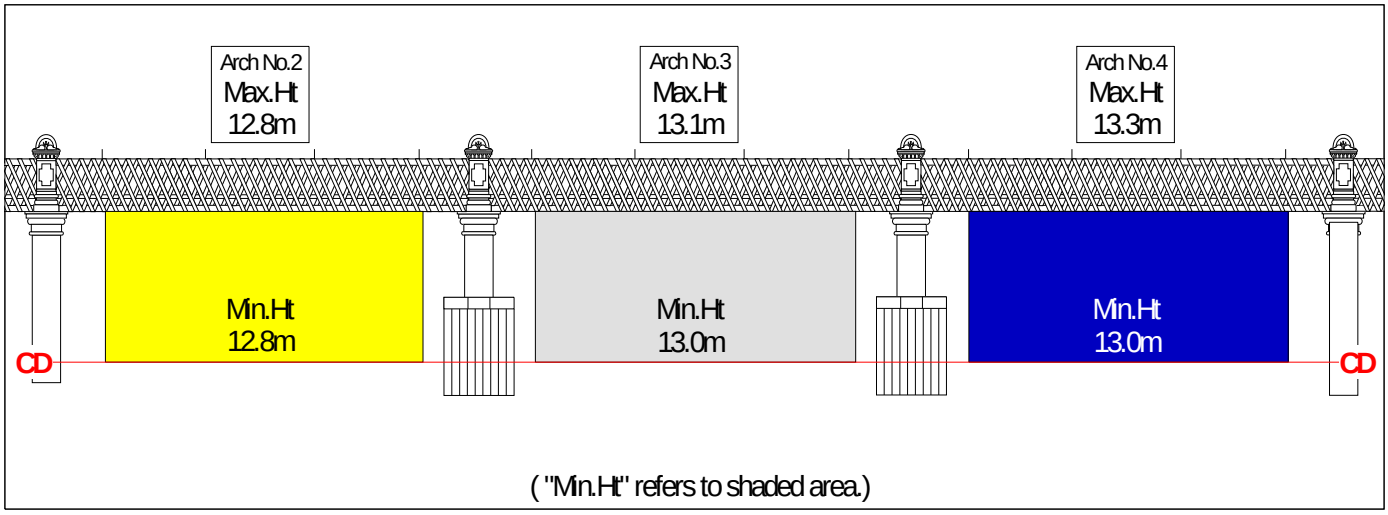
Putney to Fulham Rail Bridge

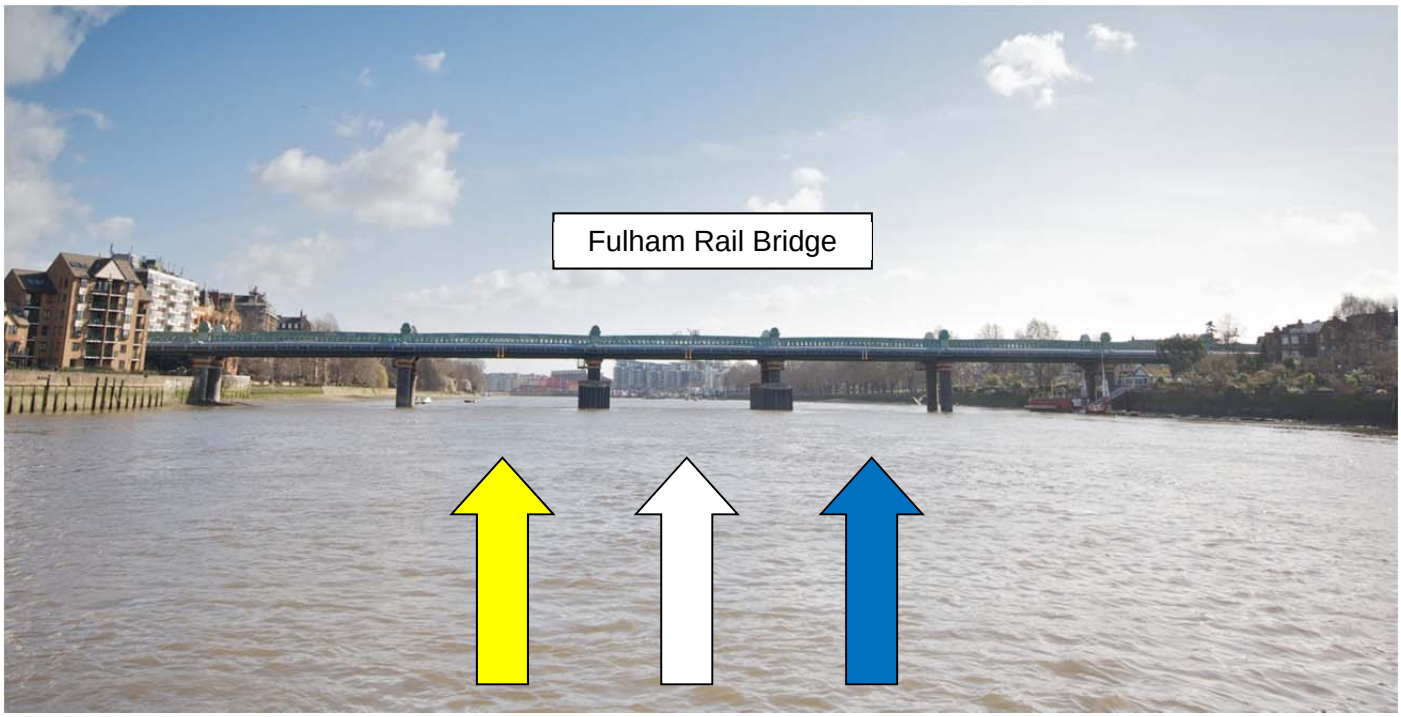
A rail bridge with five flat arches, three of which are lit for navigation. Also known as Putney Rail Bridge, the bridge also incorporates a foot bridge.

Opened in 1889, cast iron cylinders in pairs support the five river arches of the parallel sided iron trusses.

This bridge has five arches. Nos. 2, 3, and 4 are the working arches and are marked with horizontal amber lights above the arches.

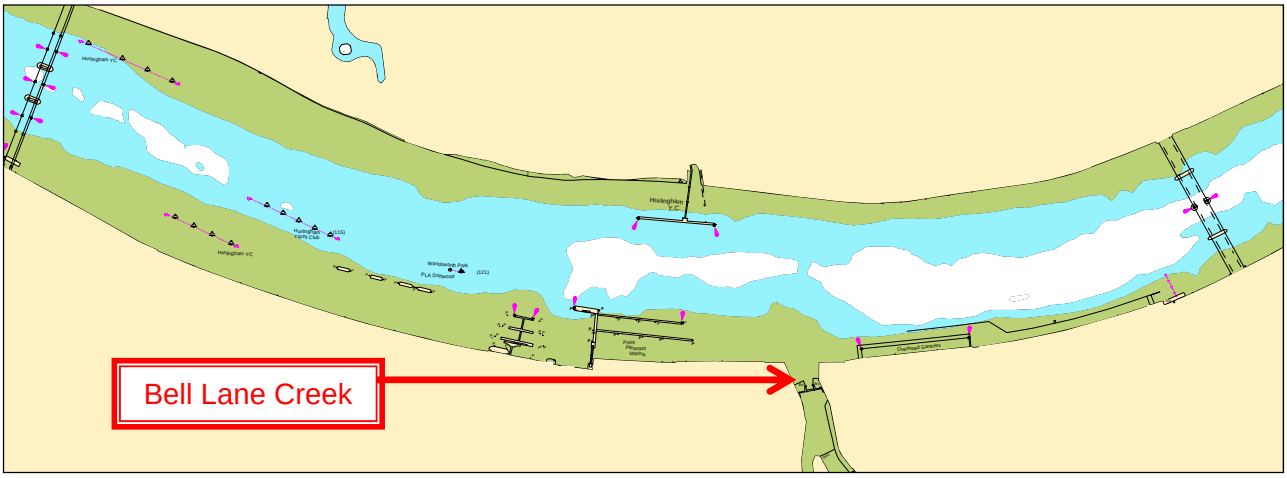
Diamond Jubilee vessels are to use **only** Arches 2, 3 and 4





Wandsworth Bridge	Remarks:- Avoid shoal by staying 70m. off Bell Lane Creek			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	(-0.5)m.	0.5m.	(-1.3)m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

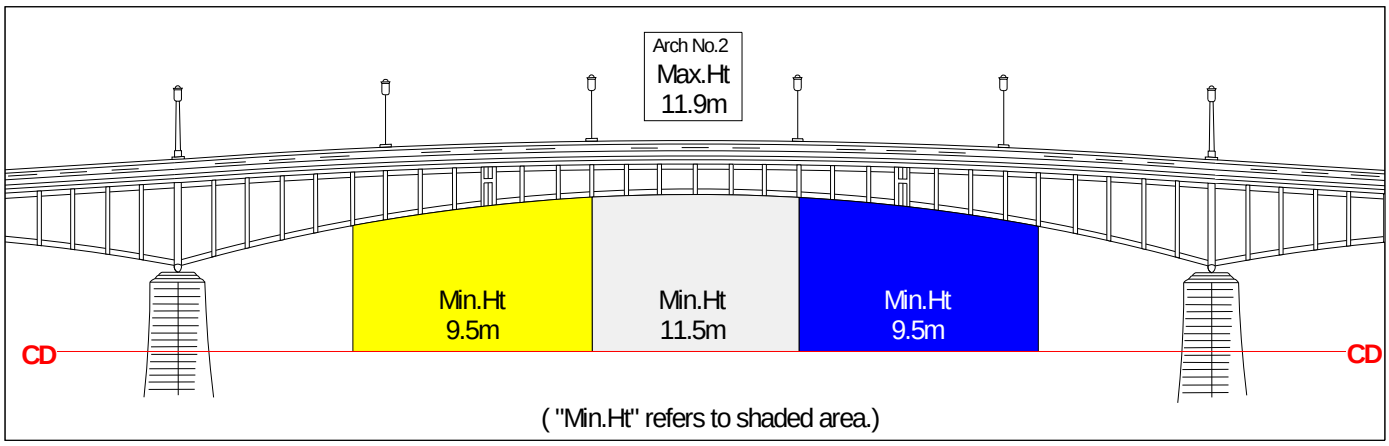
Wandsworth Bridge	Remarks:- All columns to use the single (#2) arch. The stated headroom is over the centre ½ of the arch only (where the paint colour changes)			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	9.5m.	11.5m.	9.5m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

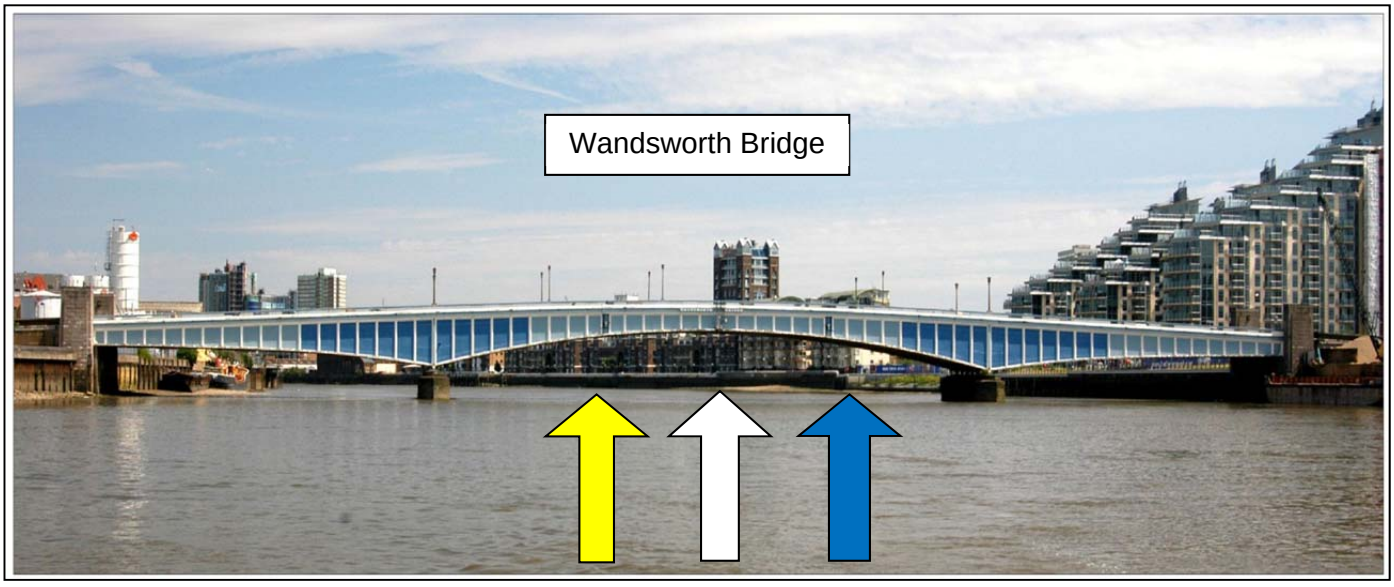


Fulham Rail to Wandsworth Bridge

The tide sets to the south on both flood and ebb tides. All vessels participating in the Diamond Jubilee must use the main centre arch only.

The least charted depth in main central arch is 0.9 metres below chart datum, which is found towards The northern side, thus to use this part of the span requires a height of tide of 1.6 metres for a vessel With a draught of 2.0 metres.



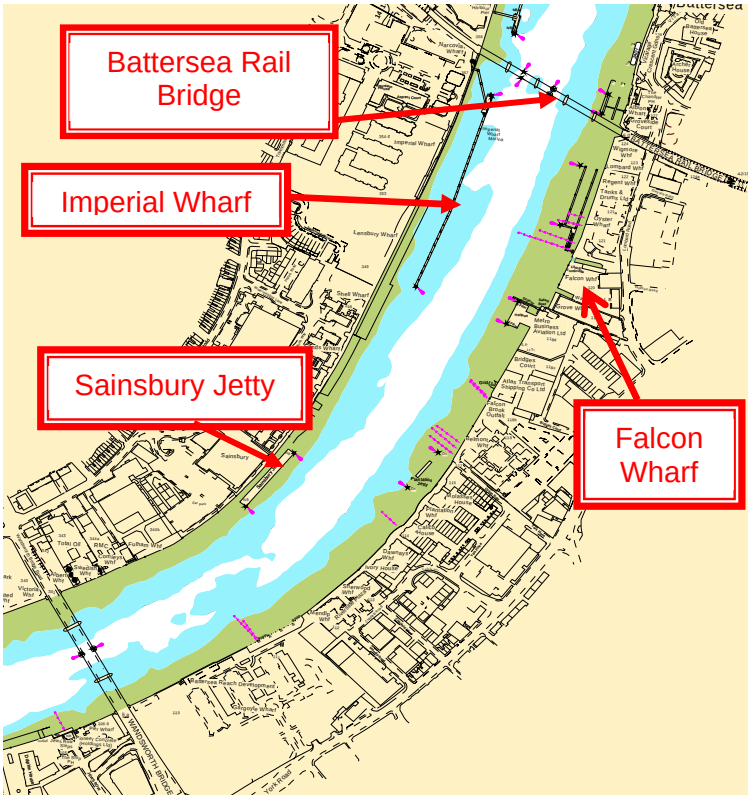


All Pageant vessels should remain within the pale blue section of the centre arch.

Battersea Rail Bridge	Remarks:- Avoid shoal by staying 70m. off Falcon Wharf			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	(0.3)	(0.7)	(-1.6)	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Battersea Rail Bridge	Remarks:- This headroom is available over the centre 1/3 of the arches only.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	(11.0)	(11.0)	(11.0)	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

Wandsworth to Battersea Rail Bridge

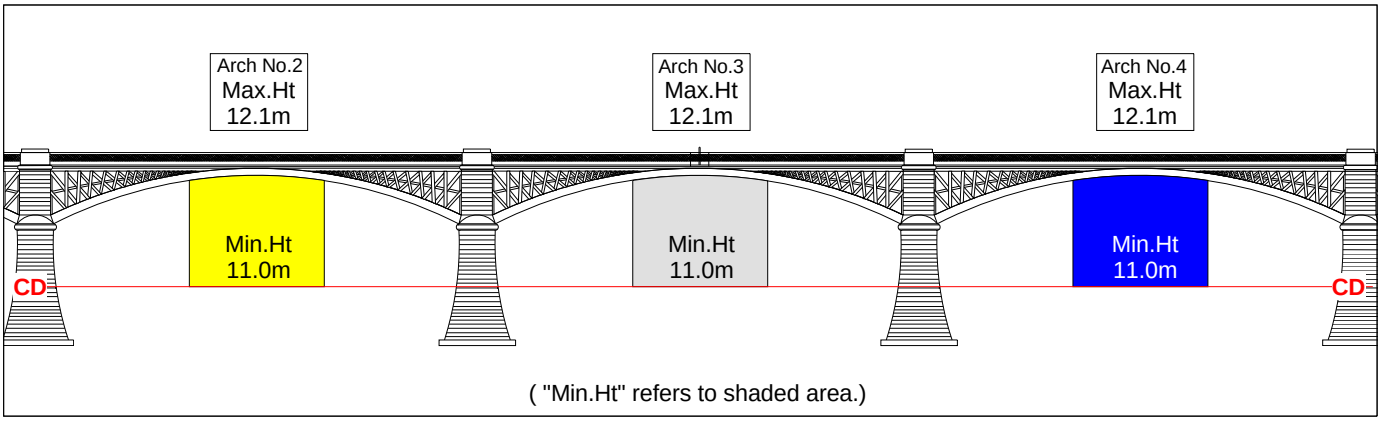


The bridge is skewed slightly across the river; during the Diamond Jubilee River Pageant **all boats must** use No. 2 , 3 and 4 arches.

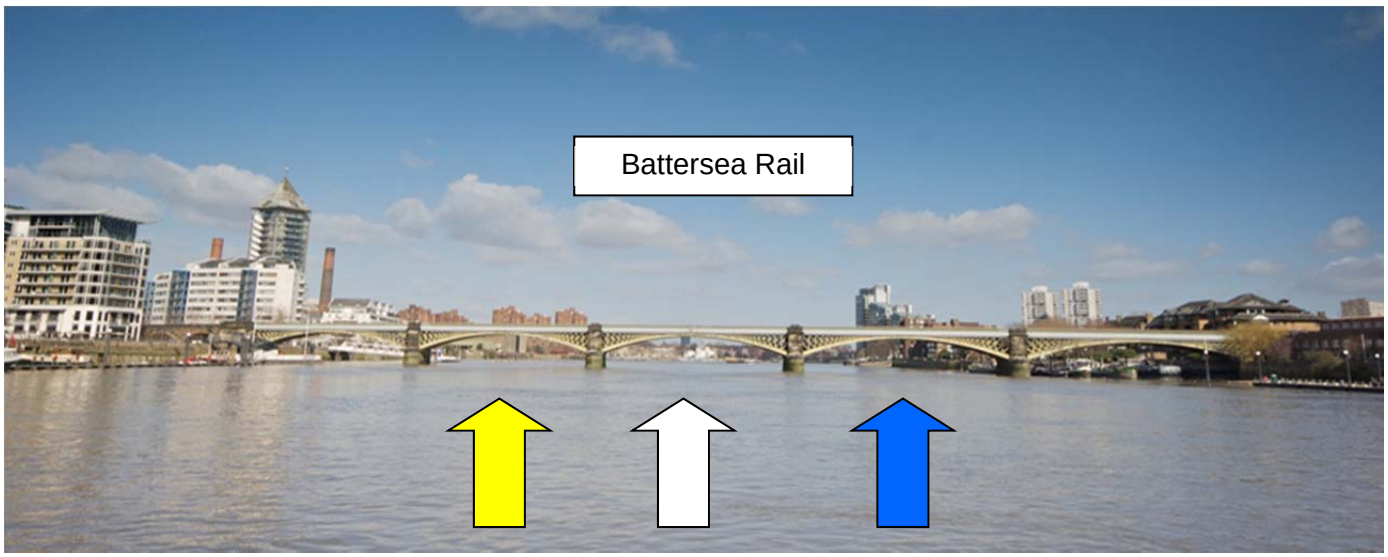
The least charted depth in No. 2 arch (left hand going downstream) is 0.3m. below chart datum, which requires a height of tide of 2.2m. for a vessel of draft 2.0m. Vessels bound for this arch should not line up for this arch until Sainsbury Jetty is abeam.

The least charted depth in No. 3 arch (Central) is 0.4m. below chart datum, which requires a height of tide of 2.1m. for a vessel of 2.0m. draft.

The least charted depth below No. 4 arch (right hand going downstream) is 2.0m. **above** chart datum, which requires a height of tide of 4.5m. for a vessel of 2.0m. draft. Vessels for this arch may start lining up the arch as they exit Wandsworth bridge.



("Min.Ht" refers to shaded area.)

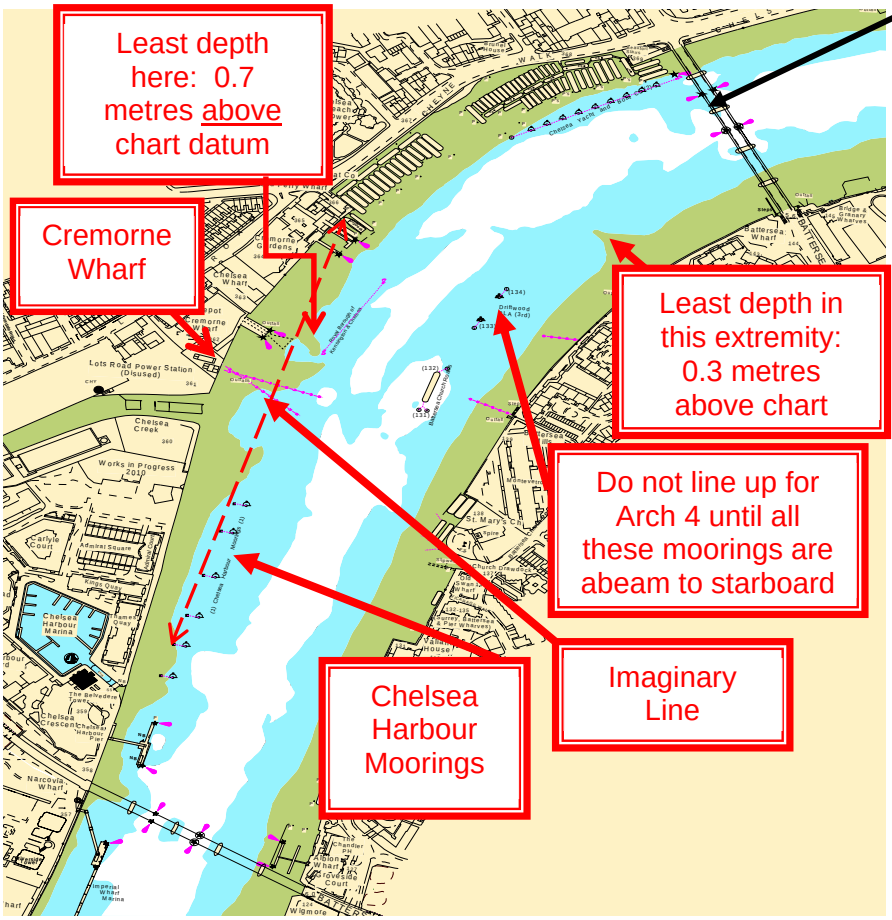


Battersea Road Bridge	Remarks:- Avoid shoal by staying 70m. off Cremorne Wharf			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	(-0.8)m.	1.4m.	0.0m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Battersea Road Bridge	Remarks:- This headroom is available over the centre 1/3 of the arches only.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	9.9m.	11.2m.	9.5m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

Queen's Diamond Jubilee – River Pageant Generic Passage Plan

Battersea Rail to Battersea Road Bridge

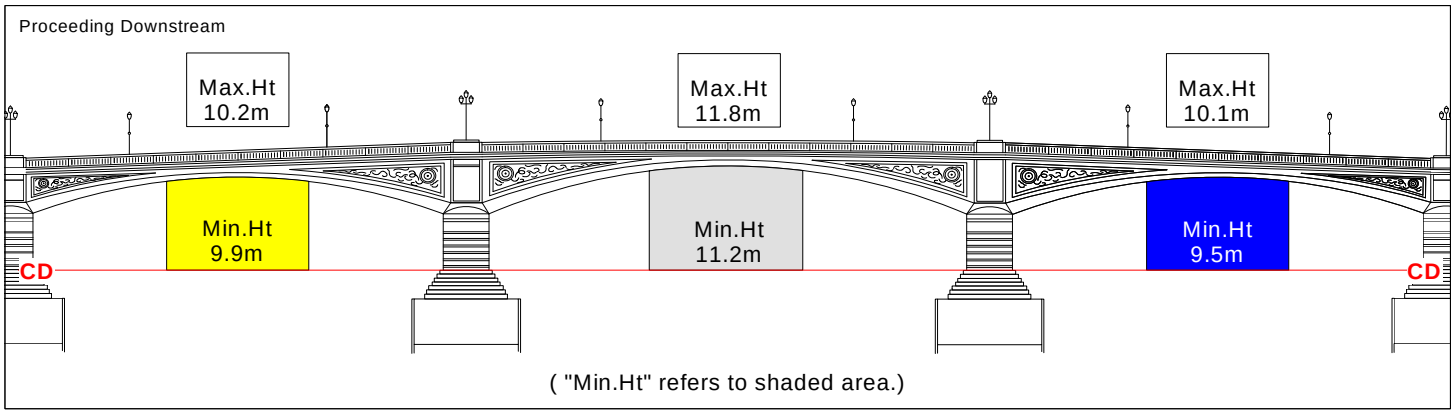


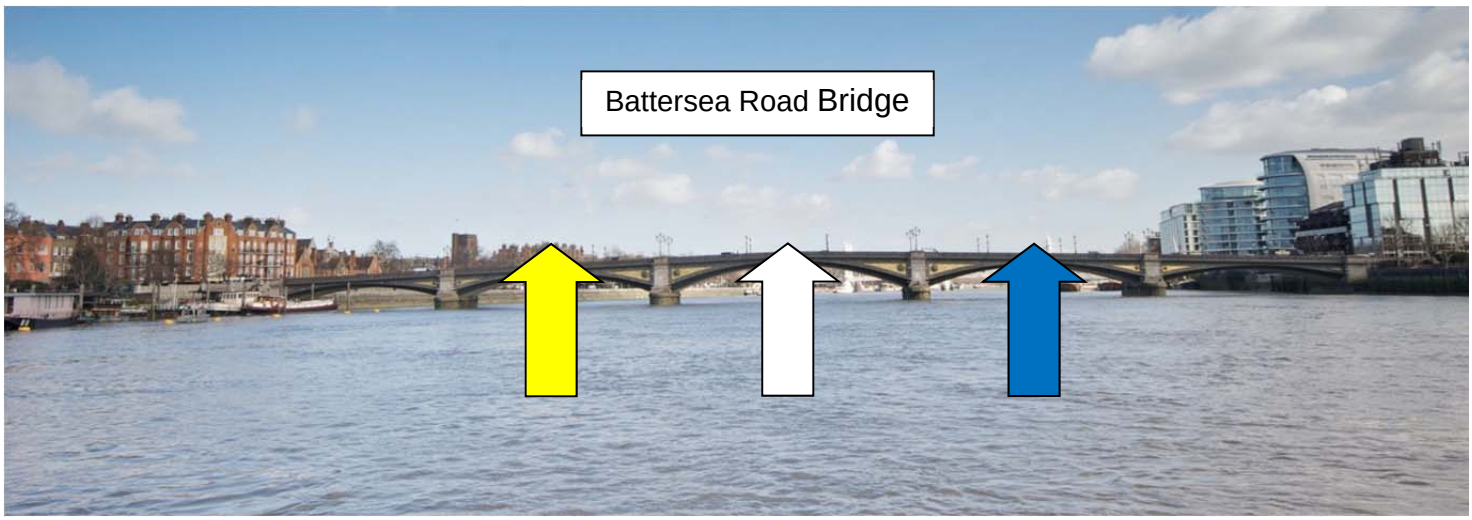
Battersea Road Bridge

At an acute bend in the river, make ample allowance for the tide setting strongly towards the north bank. Take care as the bridge design and structure obscures vision above and below the bridge. Remaining 20 metres east of an imaginary line extending northward along the line of the Chelsea harbour Moorings will keep boats clear of 0.7 metres least depths.

The least charted depth in No 2 Arch (Left hand going downstream) is 0.3 metres below chart datum, which requires a height of tide of 2.2 metres for a vessel draught of 2.0 metres.
The least charted depth in No 3 Arch (Central) is 0.4 metres below chart datum, which requires a height of tide of 2.1 metres for a vessel draught of 2.0 metres.

The least charted depth in No 4 Arch (Right hand going downstream) is 2.0 metres above chart datum, which requires a height of tide of 4.5 metres. Most water is available in the centre.



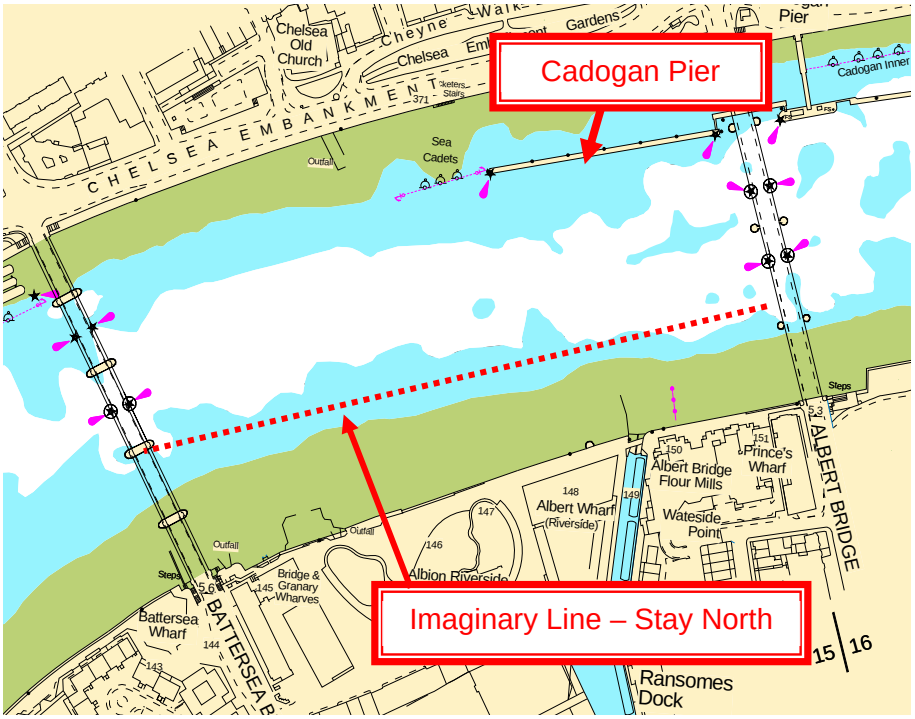


Queen's Diamond Jubilee – River Pageant Generic Passage Plan

Albert Bridge	Remarks:- Port column uses North side 0f No. 2 arch Centre column to use South side of No.2 arch and North side of No.3 arch. Stbd. column to use South side of No.3 arch			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	0.3m.	1.5m.	(-0.5)m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

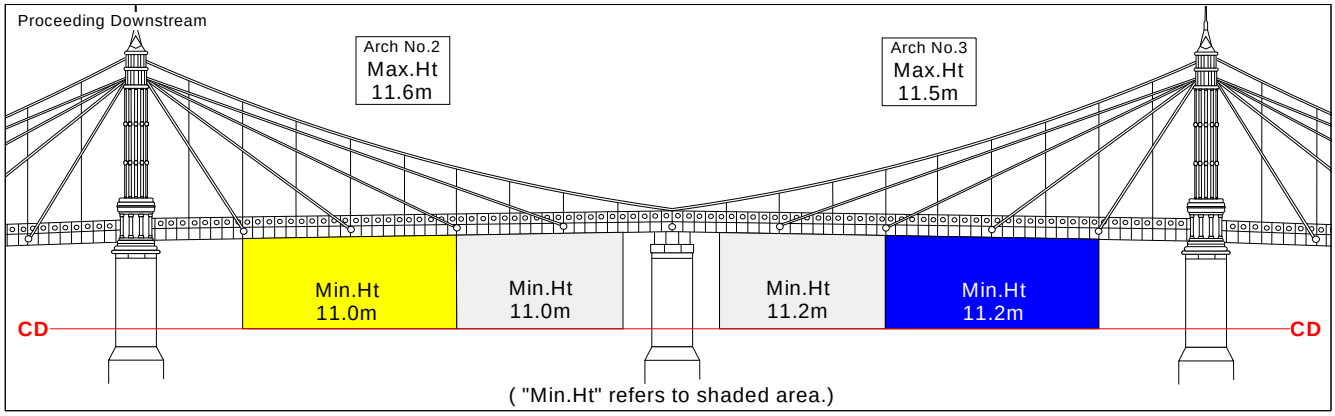
Albert Bridge	Remarks:- Port column uses North side 0f No. 2 arch Centre column to use South side of No.2 arch and North side of No.3 arch. Stbd. column to use South side of No.3 arch.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	11.0m.	11.0m.	11.2m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

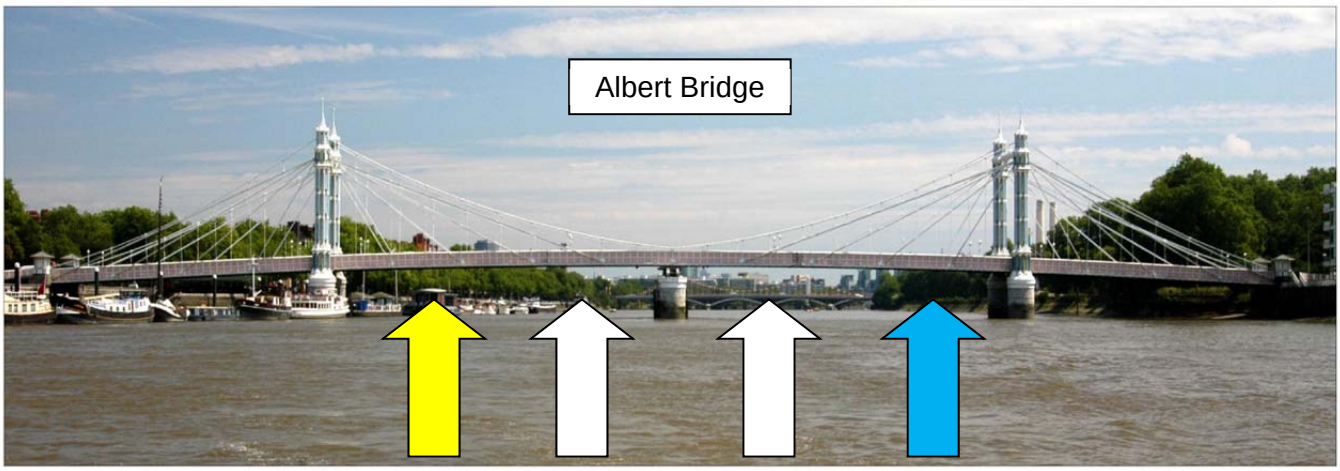
Battersea Road to Albert Bridge



No. 1 arch is permanently blocked to navigation, No. 2 and 3 arches are the working arches that all vessels use, during the Diamond Jubilee River Pageant the river will be closed so all boats must use No. 2 or 3 arches.

Ample water is available between the line of Imperial Wharf to the North and an imaginary line drawn from the centre of Arch no 4 at Battersea Road Bridge and the southernmost main tower.

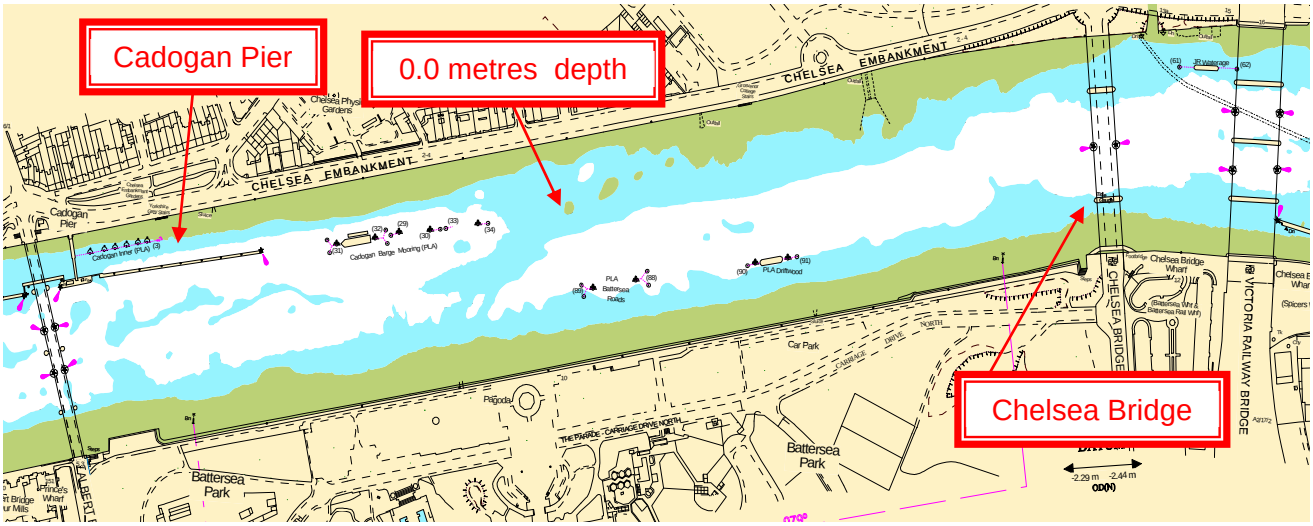


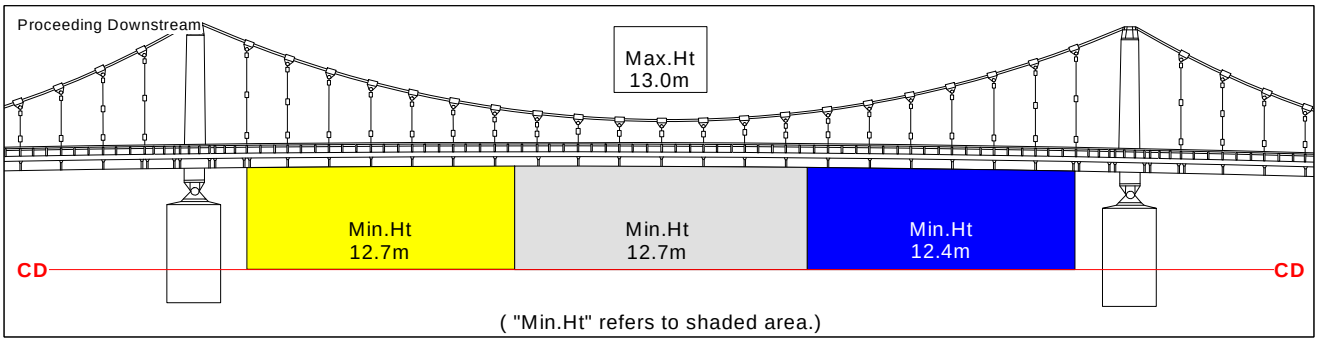


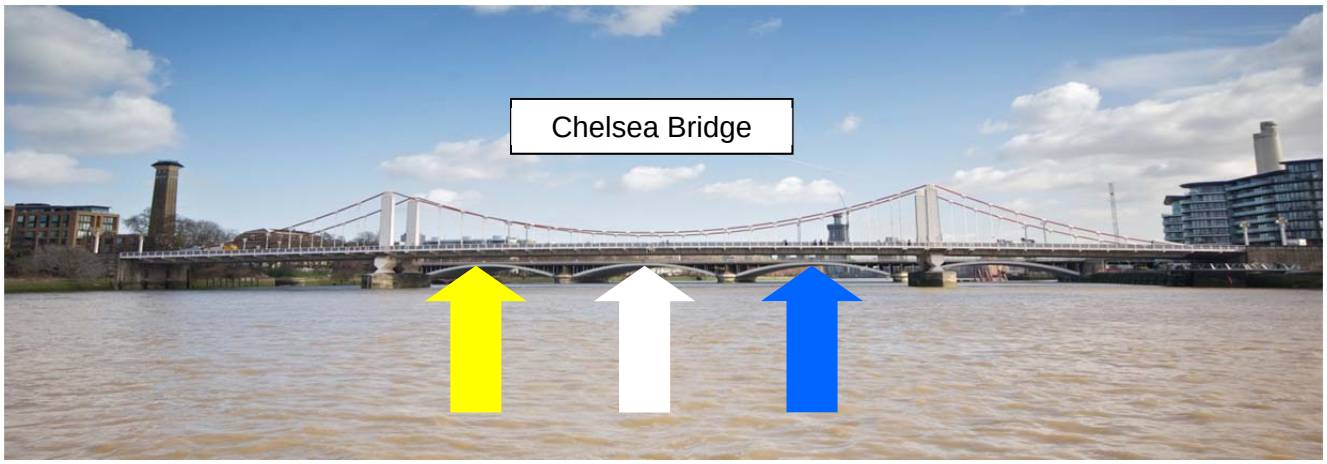
Chelsea Bridge	Remarks:- Stay 70m. off Chelsea Embankment for deeper water			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	(-0.9)m.	1.8m.	0.8m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Chelsea Bridge	Remarks:- All columns to use single centre (No.2) arch. Headroom available over whole width of arch.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	12.7m.	12.7m.	12.0m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

Albert to Chelsea Bridge and Victoria Rail Bridge (Sometime known as '*Grosvenor Rail*')





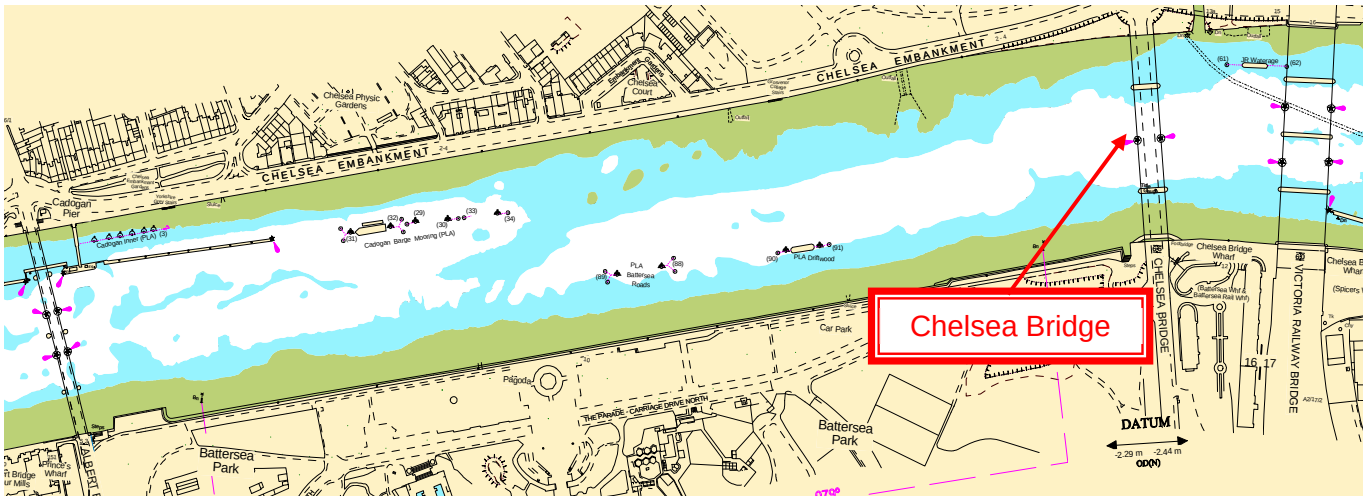


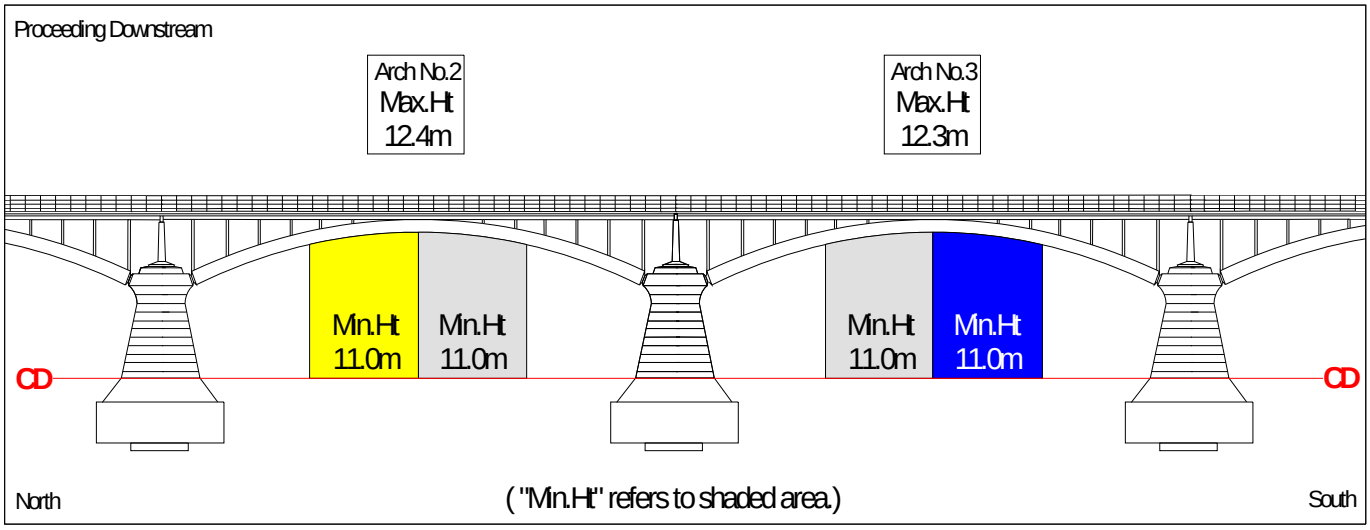
Please note that the above photograph shows Chelsea Bridge in the foreground (which has a large central span) and Victoria Rail Bridge (multiple arches) in the background. The coloured arrows relate to the central span of Chelsea Bridge and NOT the arches of Victoria Rail Bridge.

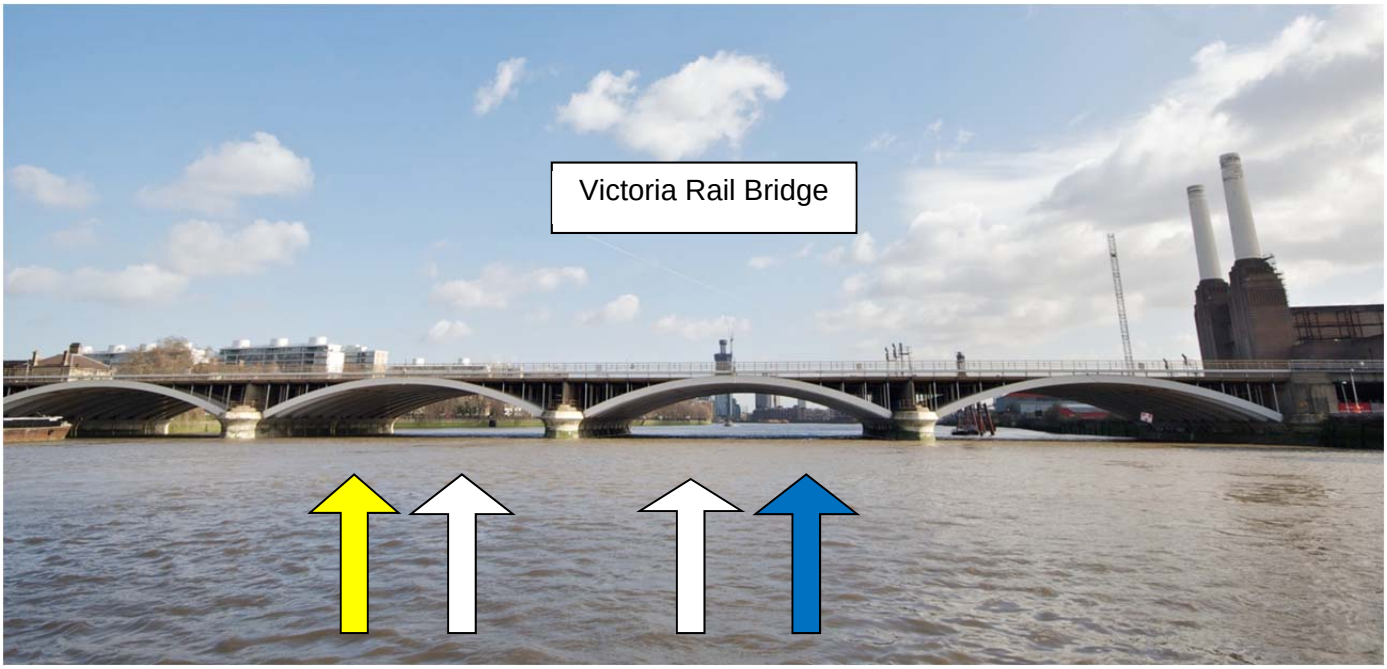
Victoria Rail Bridge	Remarks:- Depths included in Chelsea Reach (Lower)			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m) See Remarks				
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Victoria Rail Bridge	Remarks:- This headroom is available over the centre ½ of the arches only. Centre vessel column may need to split around the centre abutment with some vessels using #2 arch with the rest using #3. TBC			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	11.0m.	11.0m.	11.0m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

Chelsea to Victoria Rail Bridge







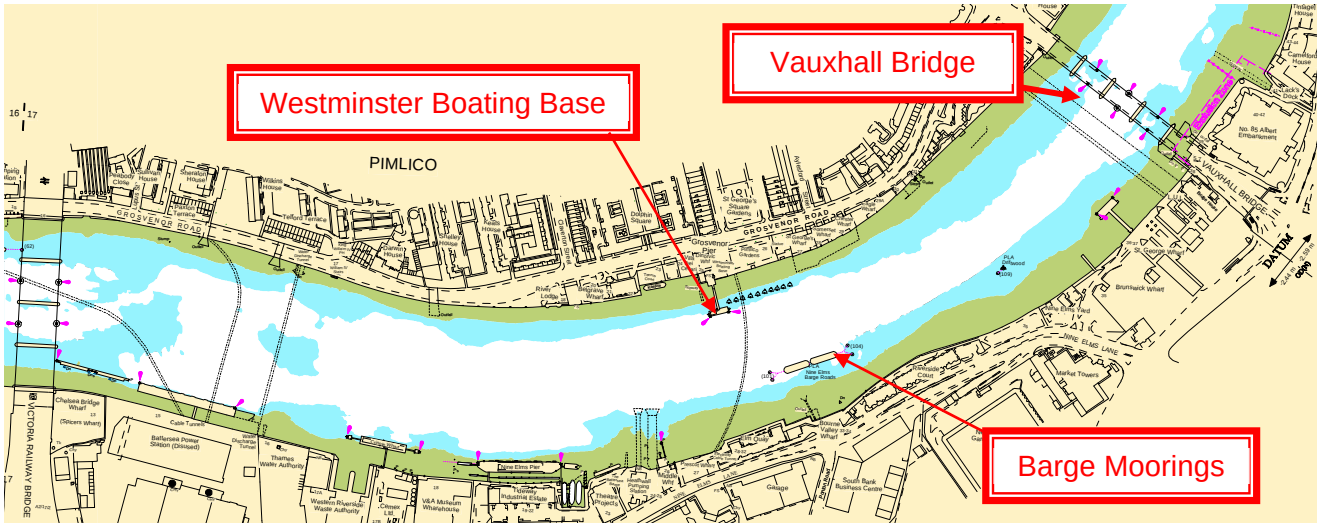
Vauxhall Bridge	Remarks:- Depths included in Chelsea Reach (Lower)			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	1.1m.	1.6m.	0.4m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

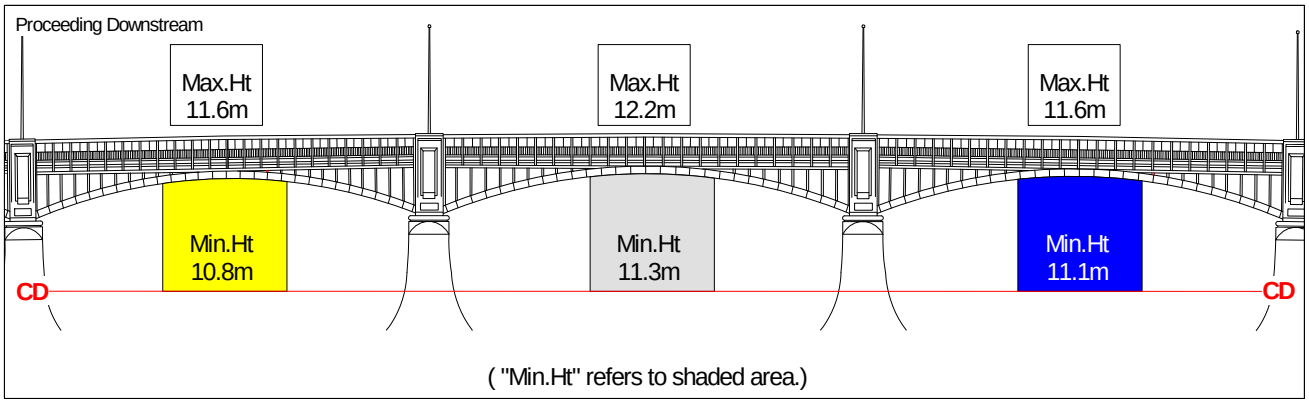
Vauxhall Bridge	Remarks:- This headroom is available over the centre 1/3 of the arches only.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	10.8m.	11.3m.	11.1m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

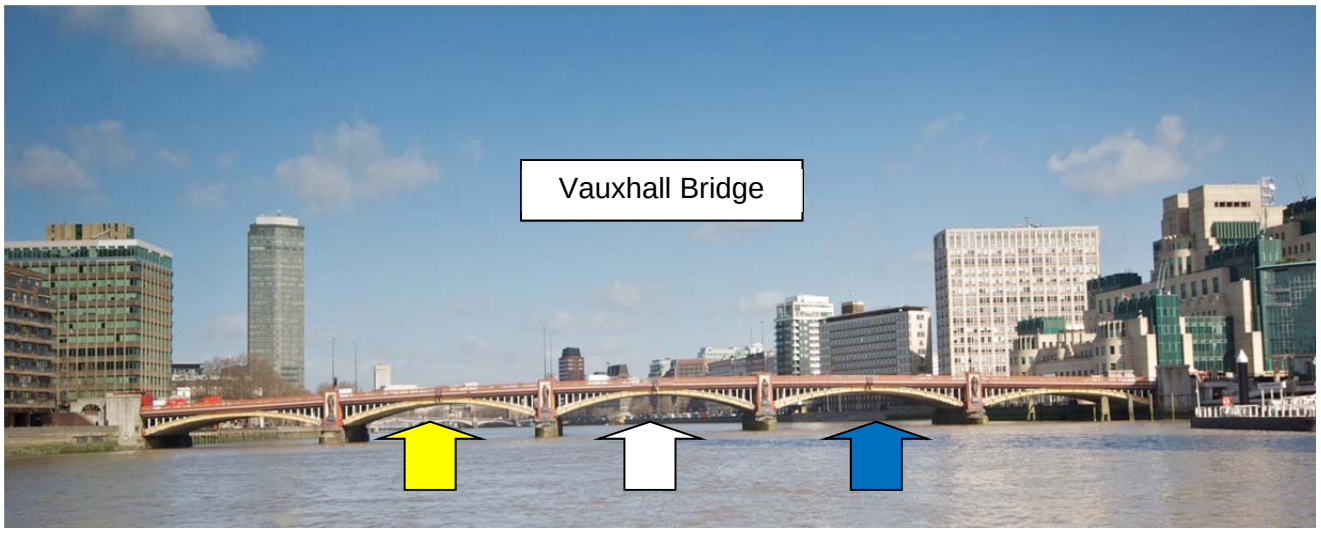
Victoria Rail to Vauxhall Bridge

At Vauxhall Bridge the tide sets south, and care is needed as vision between Lambeth Reach and Nine Elms Reach is partially obscured by the bridge structure.

Once through Victoria Rail Bridge the river bears right into Nine Elms Reach, remain between the barge moorings on the south side and Westminster Boating Base Pier on the north side. **A 15 metre wide Exclusion Zone is established** in the vicinity of Albert Embankment, extending between the upstream side of Vauxhall Bridge and the lower side of Lacks Dock. PLA Permanent Notices to Mariners P16 refers.



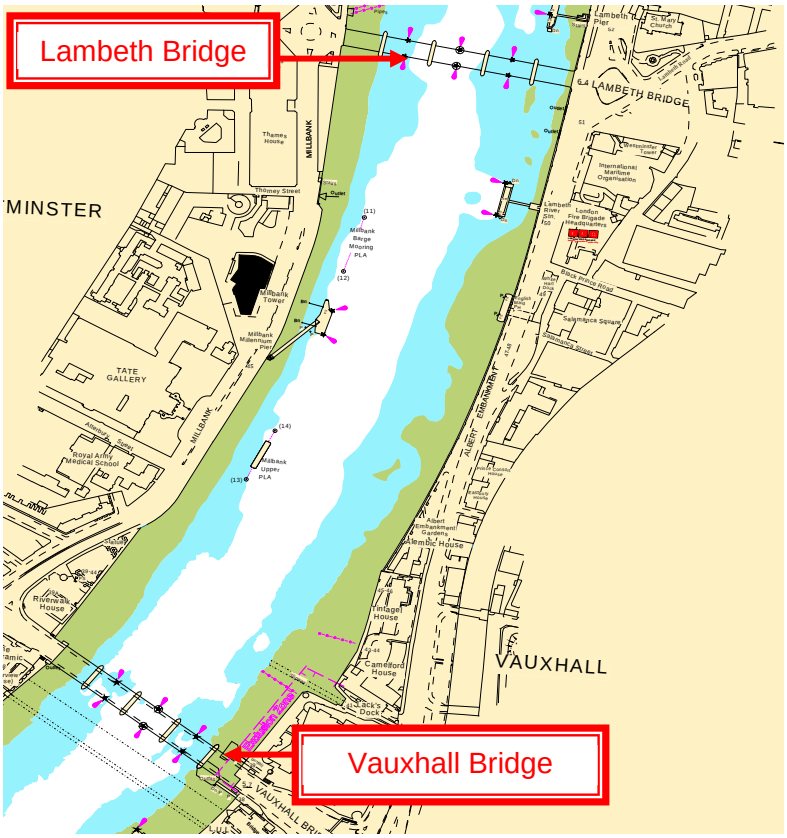




Lambeth Bridge	Remarks:-			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	0.9m.	1.6m.	(-0.5)m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Lambeth Bridge	Remarks:- This headroom is available over the centre 1/3 of the arches only.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	11.0m.	12.1m.	11.0m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

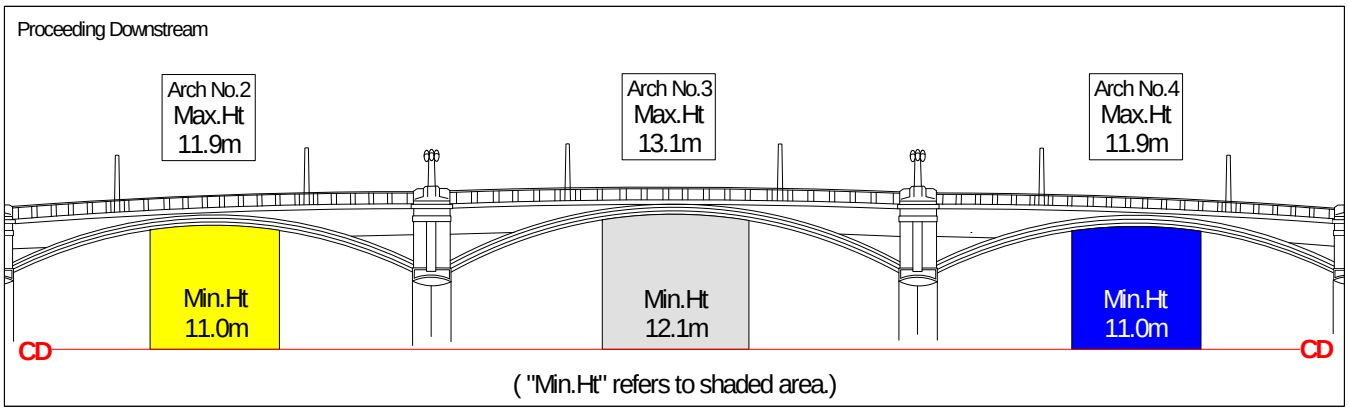
Lambeth to Westminster Bridge

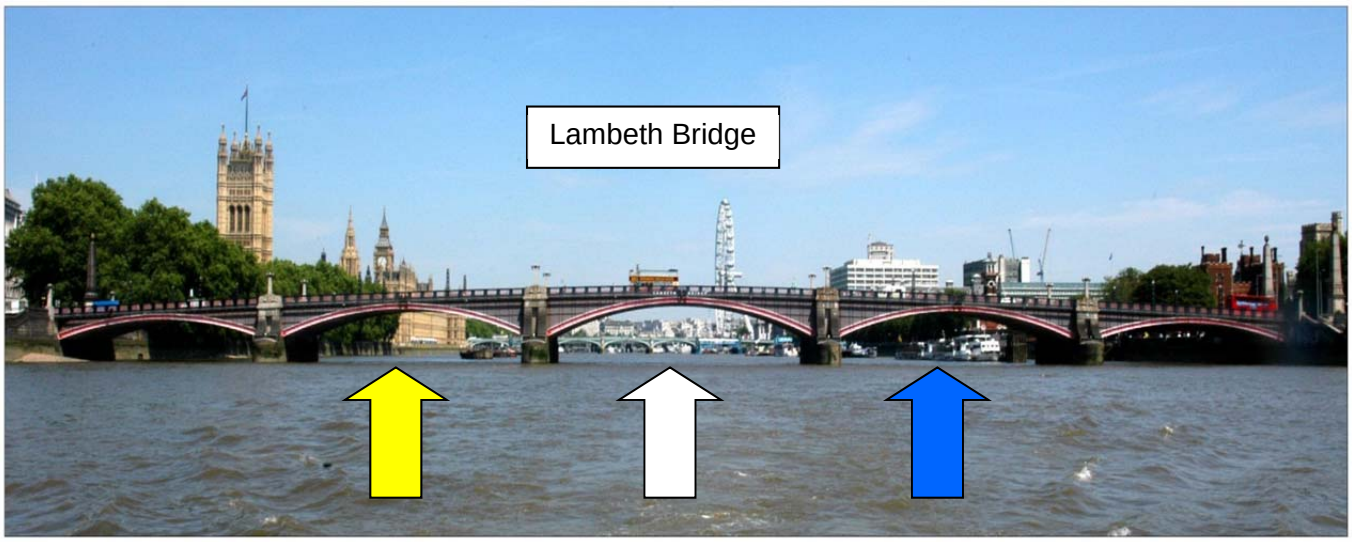


Rebuilt in 1932, Lambeth Bridge is a steel road bridge with five curved arches, supported on stone faced intermediate piers.

Nos. 2, 3 and 4 arches are the three working arches with No. 3 arch being the centre arch, all three arches will be used during the Diamond Jubilee River Pageant.

A least depth of 0.5 metres below chart datum exists on the western side of Arch No 2, otherwise depths under the bridge are at least 1.0 metres below chart datum

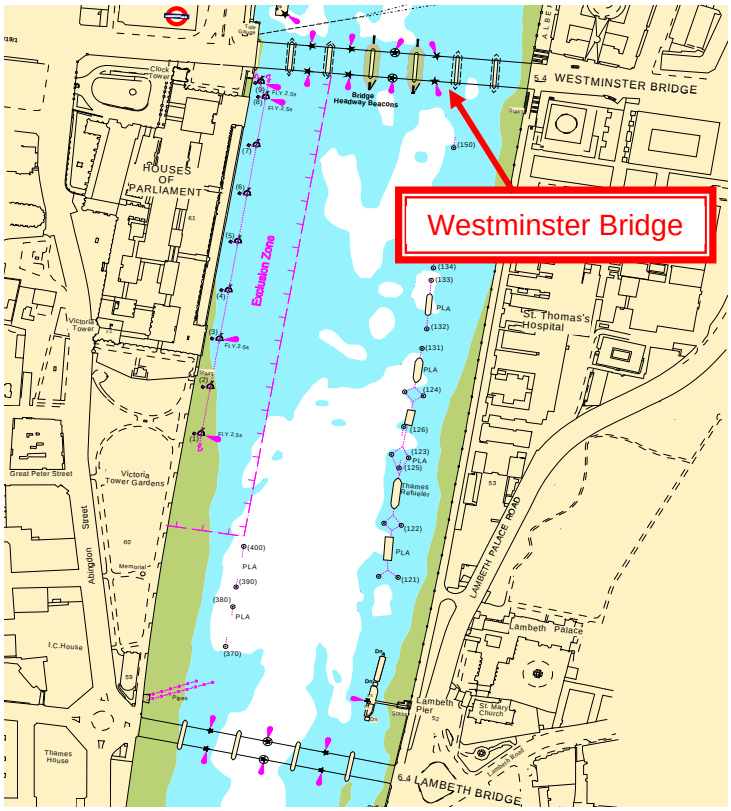




Westminster Bridge	Remarks:-			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	0.2m.	1.1m.	0.7m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Westminster Bridge	Remarks:- This headroom is available over the centre 1/3 of the arches only. Centre column of vessels to split around the centre abutment with some vessels using arch #3, while the rest use arch #4.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	10.7m.	10.9m.	10.7m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

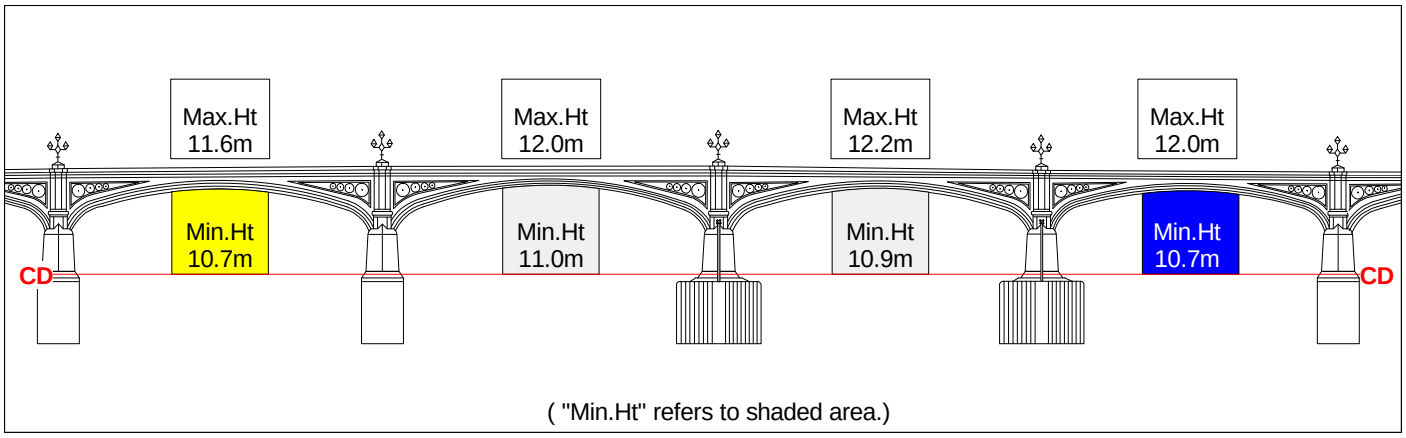
Lambeth to Westminster Bridge



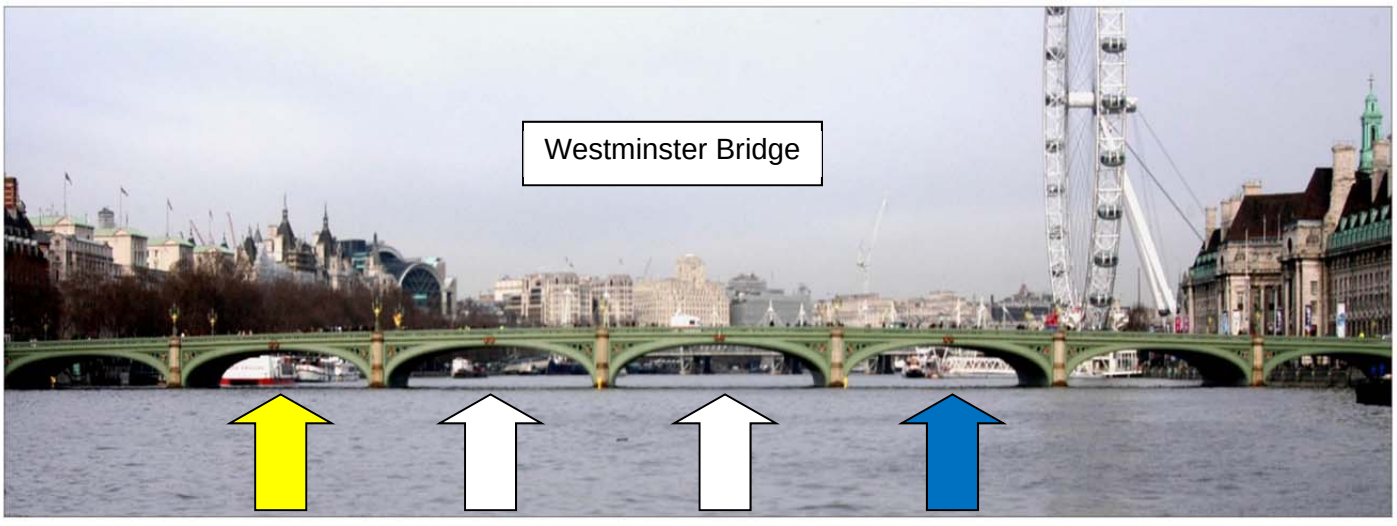
Diamond Jubilee vessels must use only Nos. 2, 3, 4, and 5 arches.

Above the bridge, on the north side, alongside the Houses of Parliament extending 70 metres into the river from the river wall there is a Security Exclusion Zone, marked by a line of small yellow buoys. **NB** Under normal circumstances no unauthorised vessels are allowed to enter this zone. However there is a dispensation for the Queen's Jubilee Pageant.

On the ebb tide, mariners should beware of turbulent eddies coming off the downstream ends of the bridge piers that can affect vessel handling. Mariners should also note the unusual tidal set downstream of No. 2 arch that sets vessels towards the pier.



("Min.Ht" refers to shaded area.)

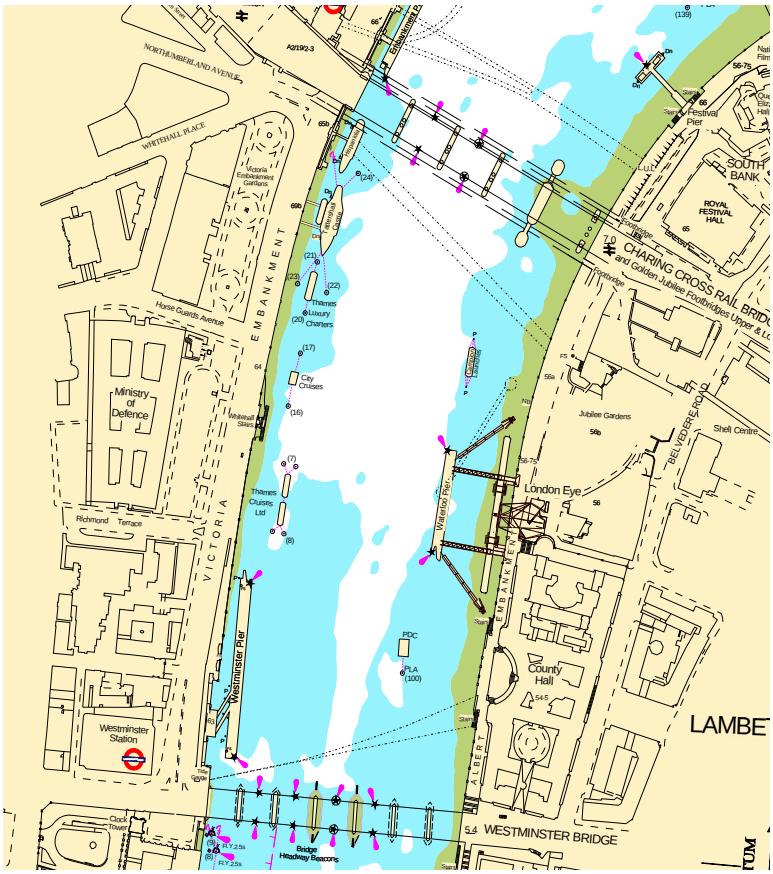


Charing Cross Rail Bridge	Remarks:-			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	0.9m.	0.3m.	(-0.3m.)	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Charing Cross Rail Bridge	Remarks: - This headroom is available over the whole width of the arches.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	13.6m.	13.6m.	13.5m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

Queen's Diamond Jubilee – River Pageant Generic Passage Plan

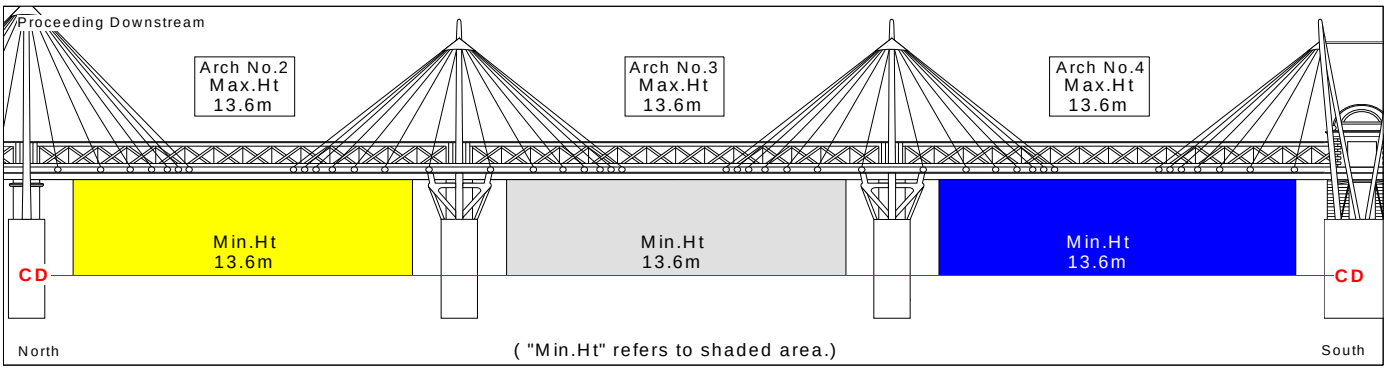
Westminster to Charing Cross Rail Bridge

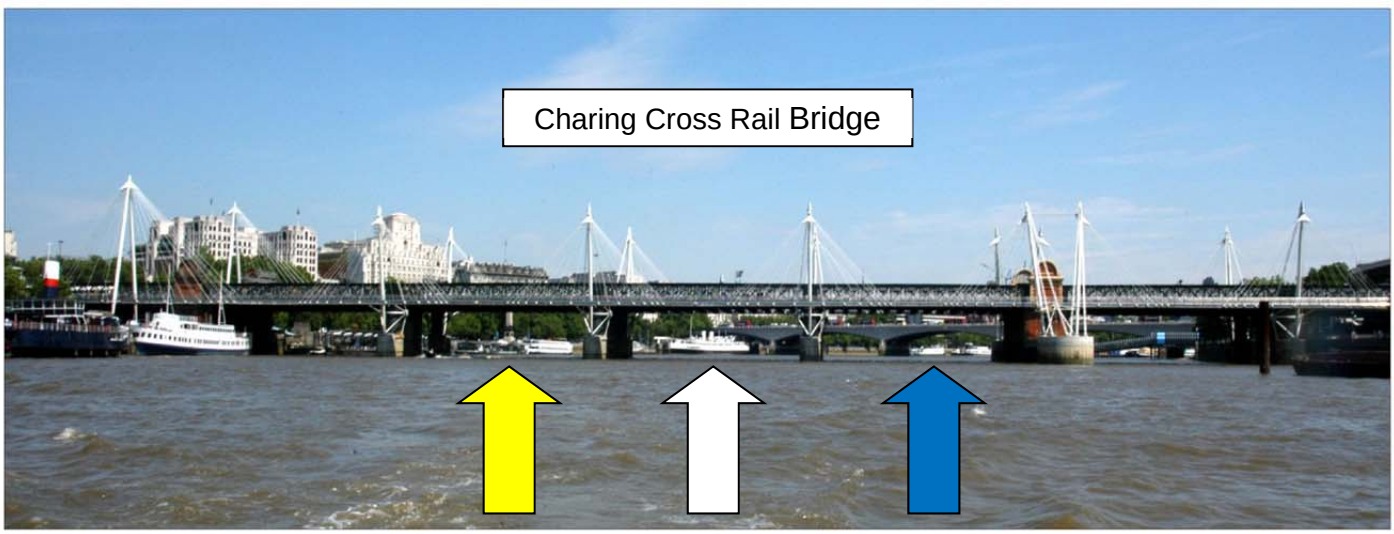


This rail bridge combines with the Golden Jubilee Footbridges (previously named Hungerford) on either side of the main structure. The main bridge has six arches, four of which are navigable. The iron girder railway bridge superstructure is supported on four other intermediate supports in the river each consisting of four cast iron cylinders. Footbridges are added to both sides of the railway bridge. The concrete faced steel deck of the footbridge is supported by cables from steel towers set on extended concrete foundations around the existing piers.

Embankment Pier is on the north side immediately downstream of the bridge, which makes No 1 arch unusable during the Diamond Jubilee Pageant.

There are numerous vessel moorings on both sides of the river – **Diamond Jubilee Pageant vessels, including man-powered vessels are to remain within the main authorised channel and are not to pass inshore of any of these moorings**.

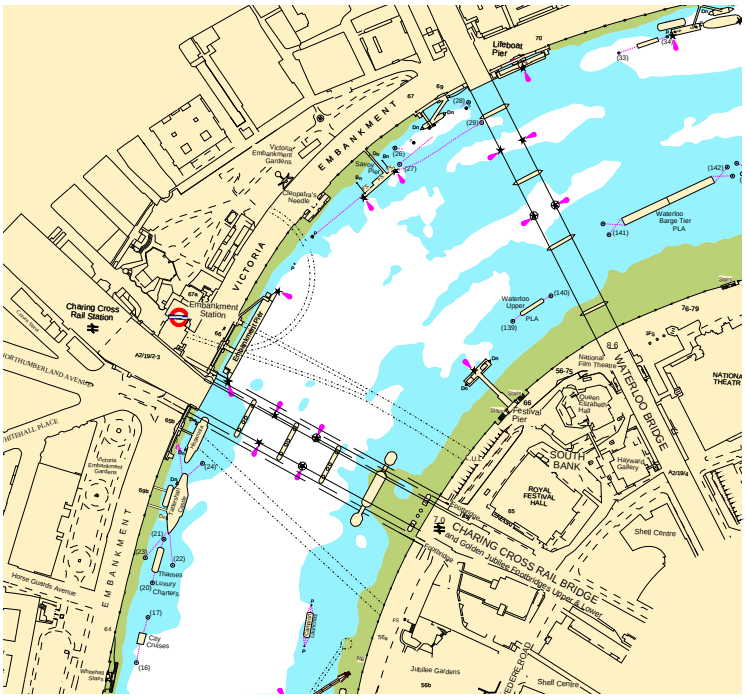




Waterloo Bridge	Remarks:-			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m.)	1.2m.	1.1m.	0.5m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Waterloo Bridge	Remarks:- Headroom is available over whole width of arches.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom(m)	10.5m.	10.5m.	10.5m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

Charing Cross Rail to Waterloo Bridge

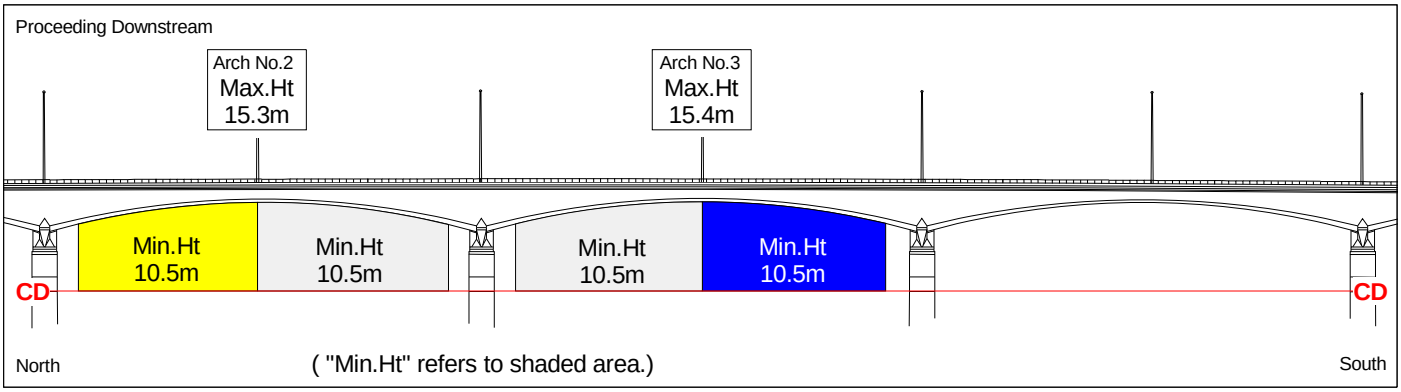


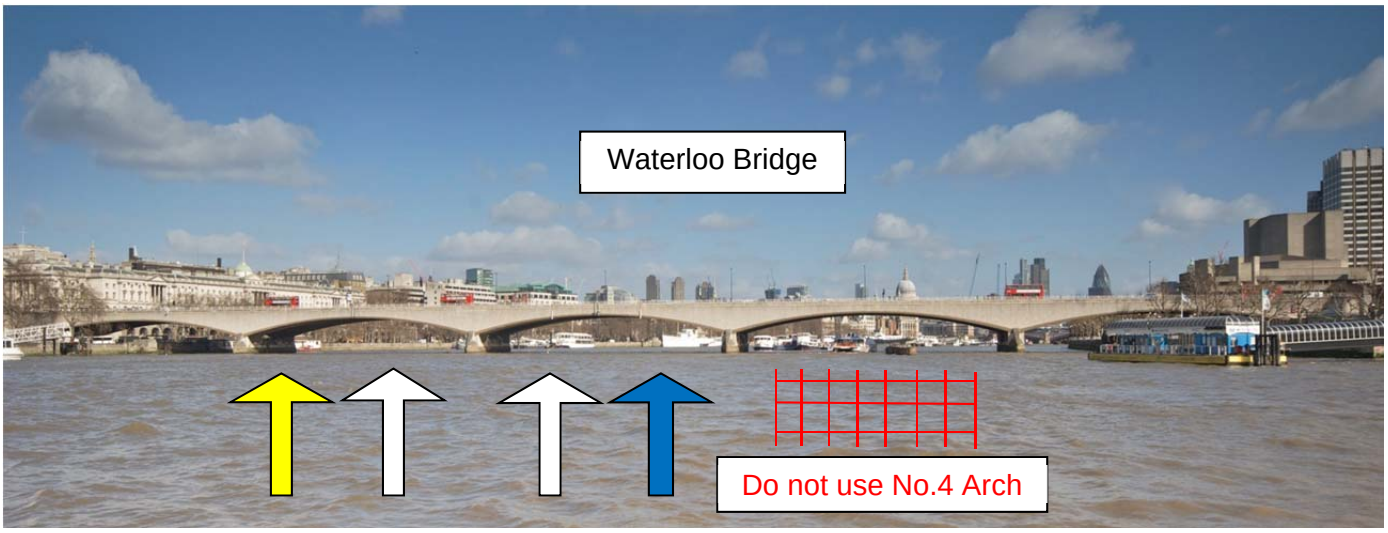
Waterloo Bridge, rebuilt and completed in 1944 is a concrete bridge with five gently curved arches, three of which are navigable; the two main working arches are No. 2 and 3.

The bridge is situated on a 90º bend in the river, causing both flood and ebb tides to set strongly to the north. Mariners should note that visibility between Lambeth Reach and Kings Reach is partially obscured by the bridge structure.

During the Diamond Jubilee River Pageant all vessels are to use No. 2 and 3 Arch, leaving No. 4 Arch for emergency services and PLA vessels.

NB. Heights at the arch edges as they meet the buttresses are approx 5 metres less than those in the centre of the arch.

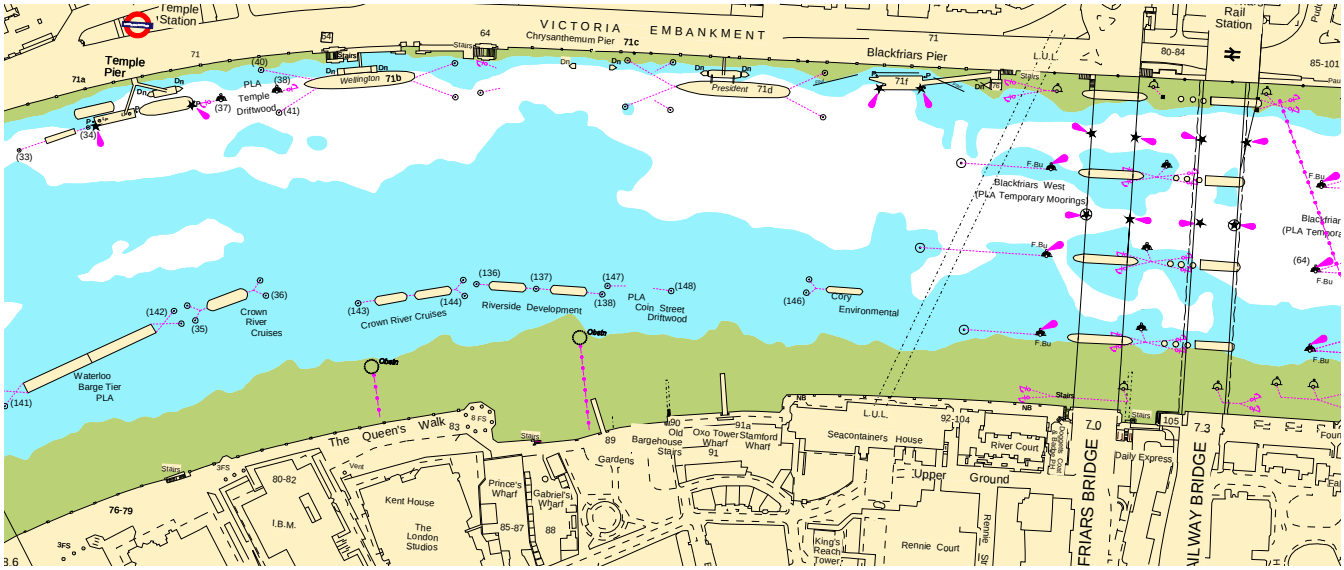




Blackfriars Road Bridge	Remarks:-			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	0.0m.	0.7m.	0.3m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Blackfriars Road Bridge	Remarks:- This headroom is available over the centre 1/3 of the arches only. Blackfriars Rail Bridge has greater clearances.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	12.5m.	13.5m.	12.3m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

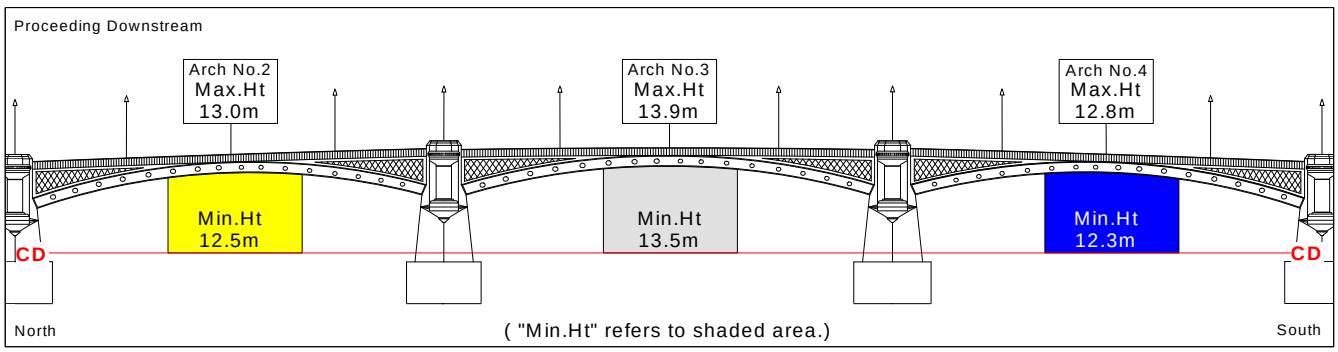
Waterloo to Blackfriars Road and Rail Bridges

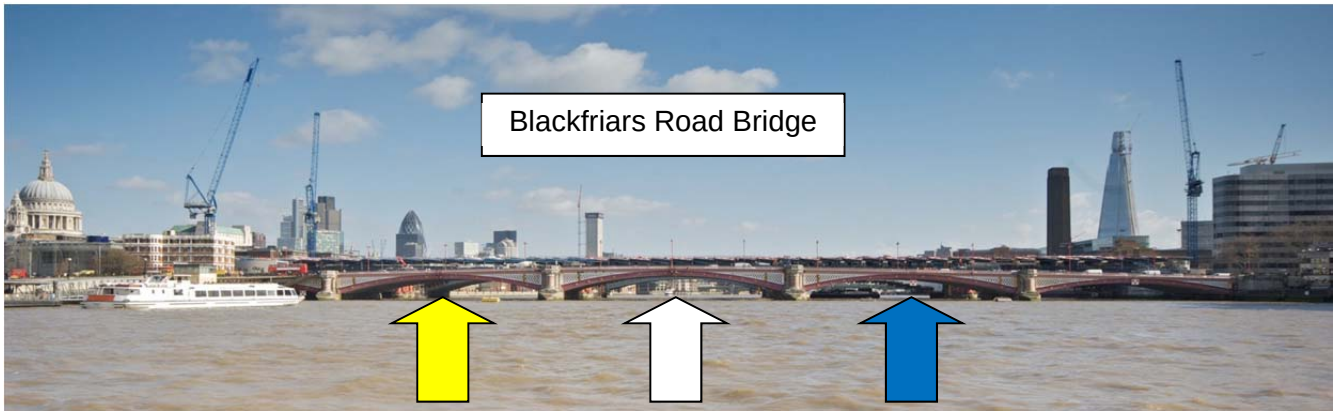


Blackfriars Road Bridge was rebuilt in 1869 as a five arched steel bridge supported on four stone faced intermediate supports.

Blackfriars Rail and Road Bridges are close together with the remaining caissons of a previous bridge sandwiched between them; both bridges have almost exactly the same air draft availability. Diamond Jubilee Pageant vessels should use No, 2, 3 and 4 arches only.

Mariners beware: owing to the close proximity of the road and rail bridges, very strong currents and eddies may be encountered by vessels transiting this area, particularly on the ebb tide, which will be running during the Pageant. No. 5 arch is also navigable and is to be kept clear for use by Emergency Services and PLA vessels.





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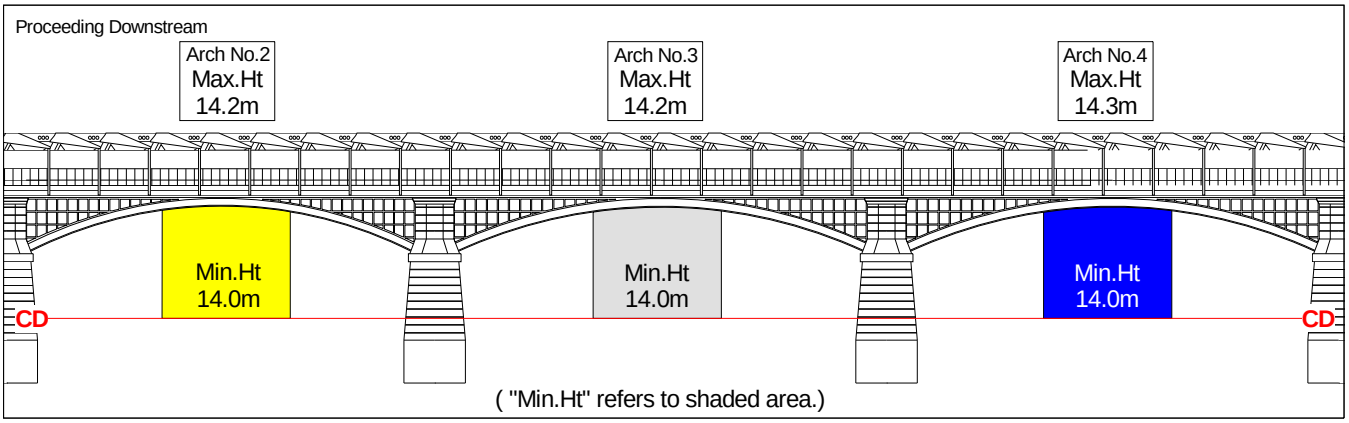
Waterloo to Blackfriars Road and Rail Bridges

BLACKFRIARS RAIL BRIDGE

A rail bridge built in 1886 with four intermediate piers and stone faced abutments supporting 5 arched spans. A major redevelopment of the bridge started in 2009, which included the construction of a station on the bridge that you can see now. Blackfriars Rail and Road Bridges are close together with the remaining caissons of a previous bridge (St Paul's Rail Bridge) sandwiched between them. Diamond Jubilee Pageant vessels should use No. 2, 3 and 4 arches only.

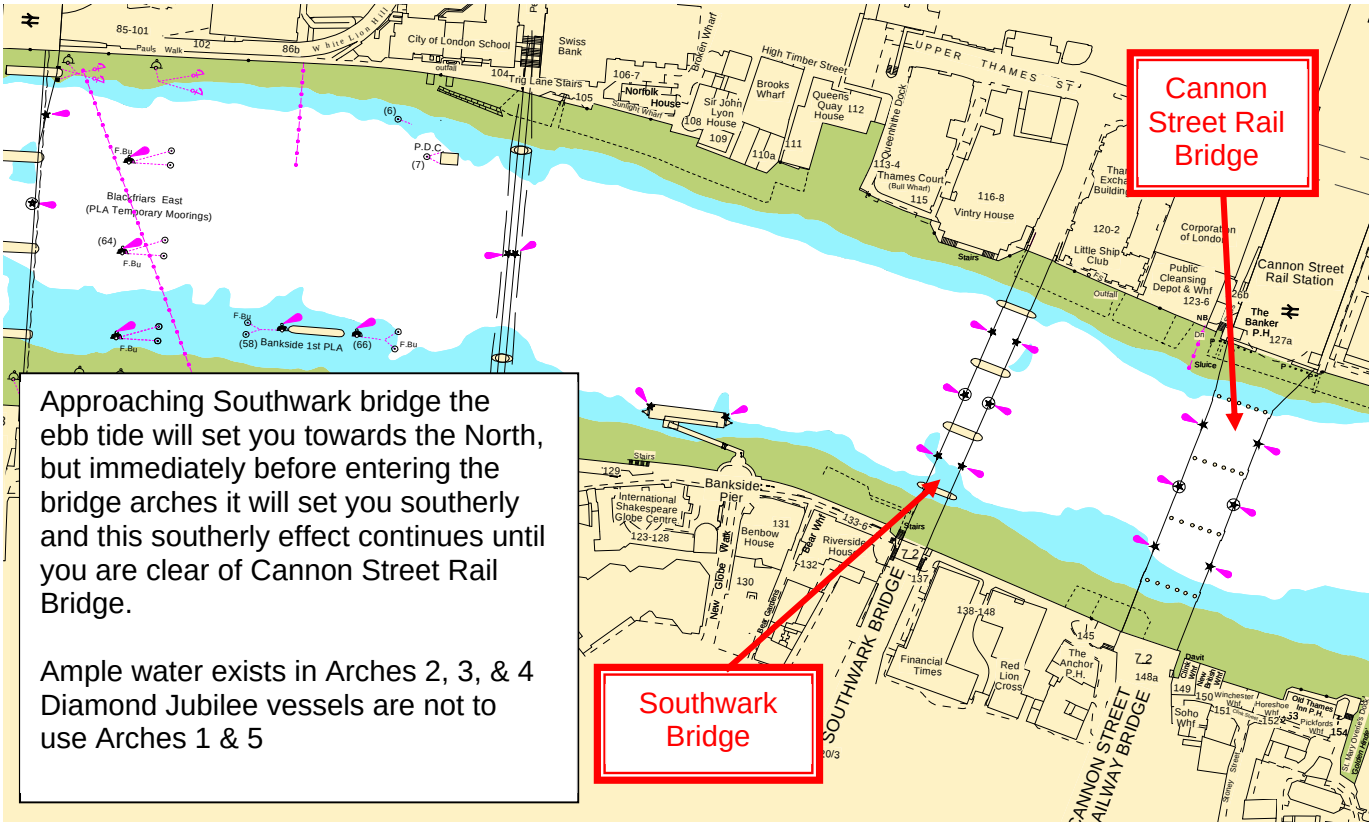


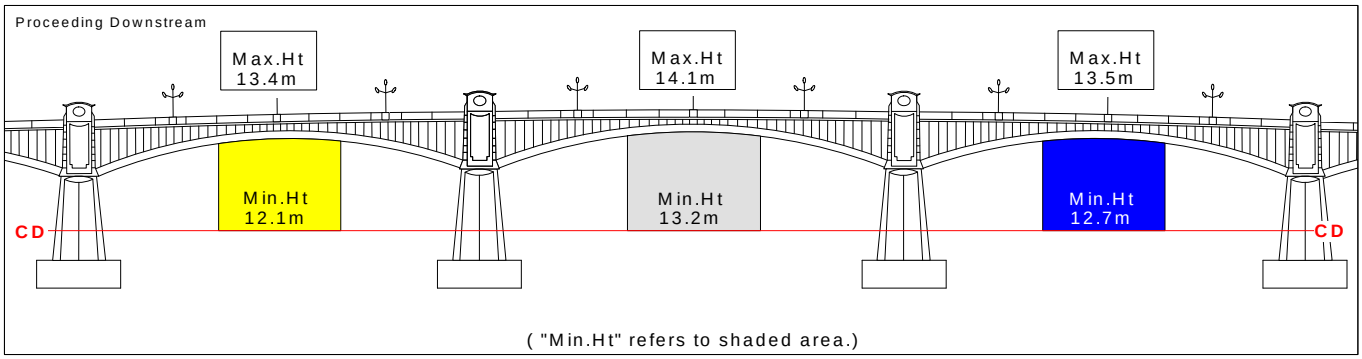
It should be noted that Blackfriars Road and Rail bridges are in close proximity to each other. Therefore each column of vessels should continue through the corresponding arch of the Rail Bridge.

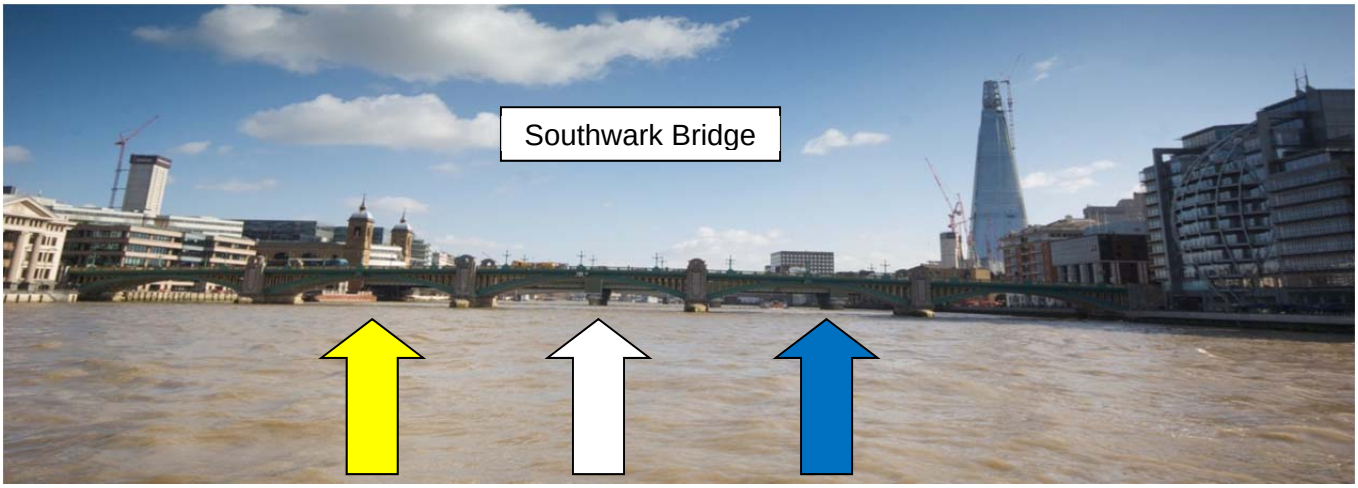
Southwark Bridge	Remarks:-			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	1.4m.	1.3m.	1.0m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Southwark Bridge	Remarks:- This headroom is available over the centre 1/3 of the arches only. Millennium Foot bridge is considerably higher than other bridges (15.8m.)			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	12.1m.	13.2m.	12.7m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

Blackfriars to Southwark Bridge



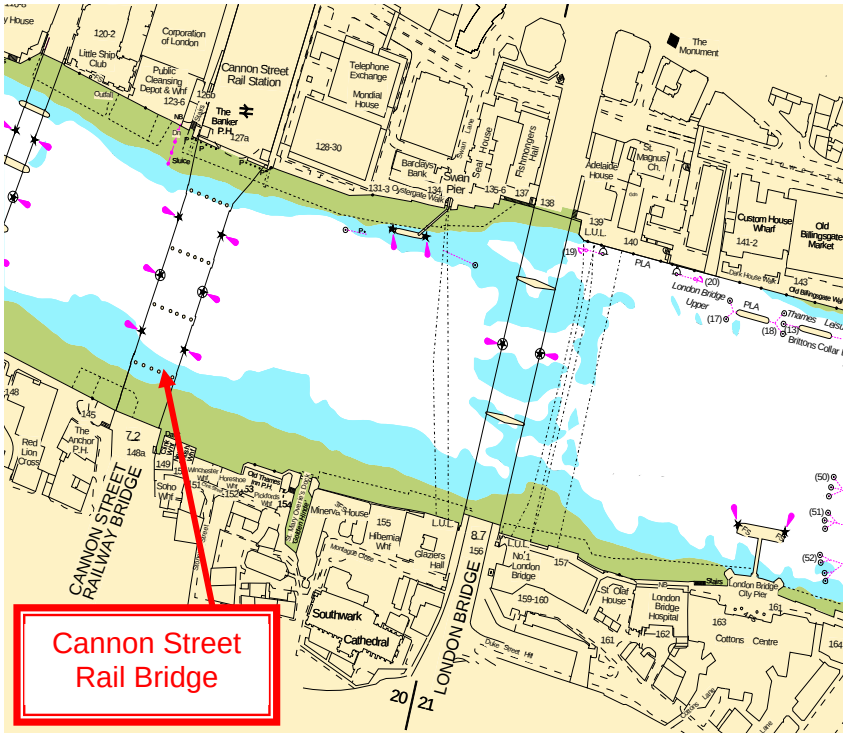




Cannon Street Rail Bridge	Remarks:- Depths included in Blackfriars Road/Rail Bridges depths.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)				
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Cannon Street Rail Bridge	Remarks:- Headroom is available over whole width of arches.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	14.0m.	14.2m.	14.0m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

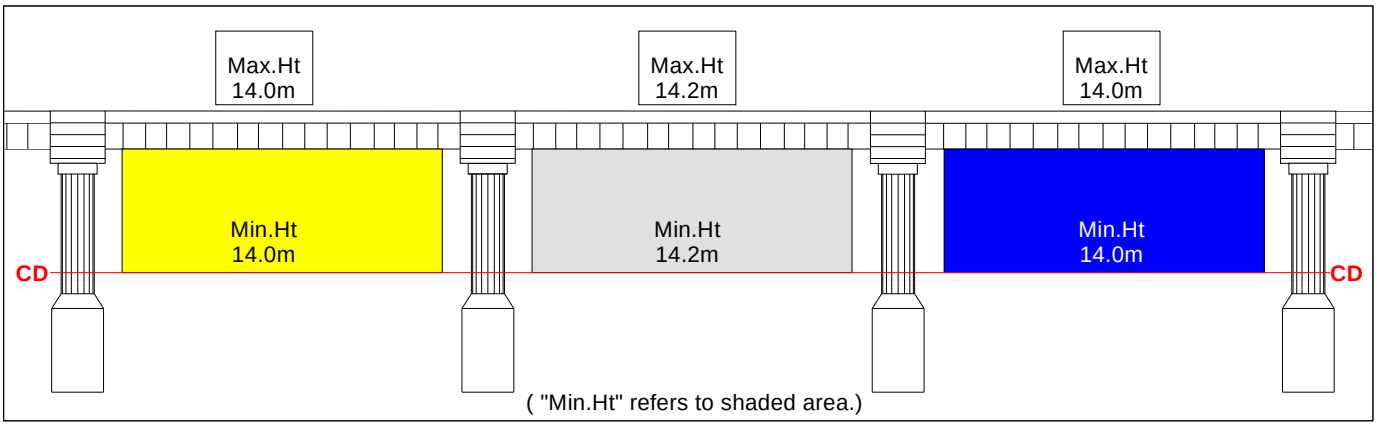
Southwark to Cannon Street Rail Bridge

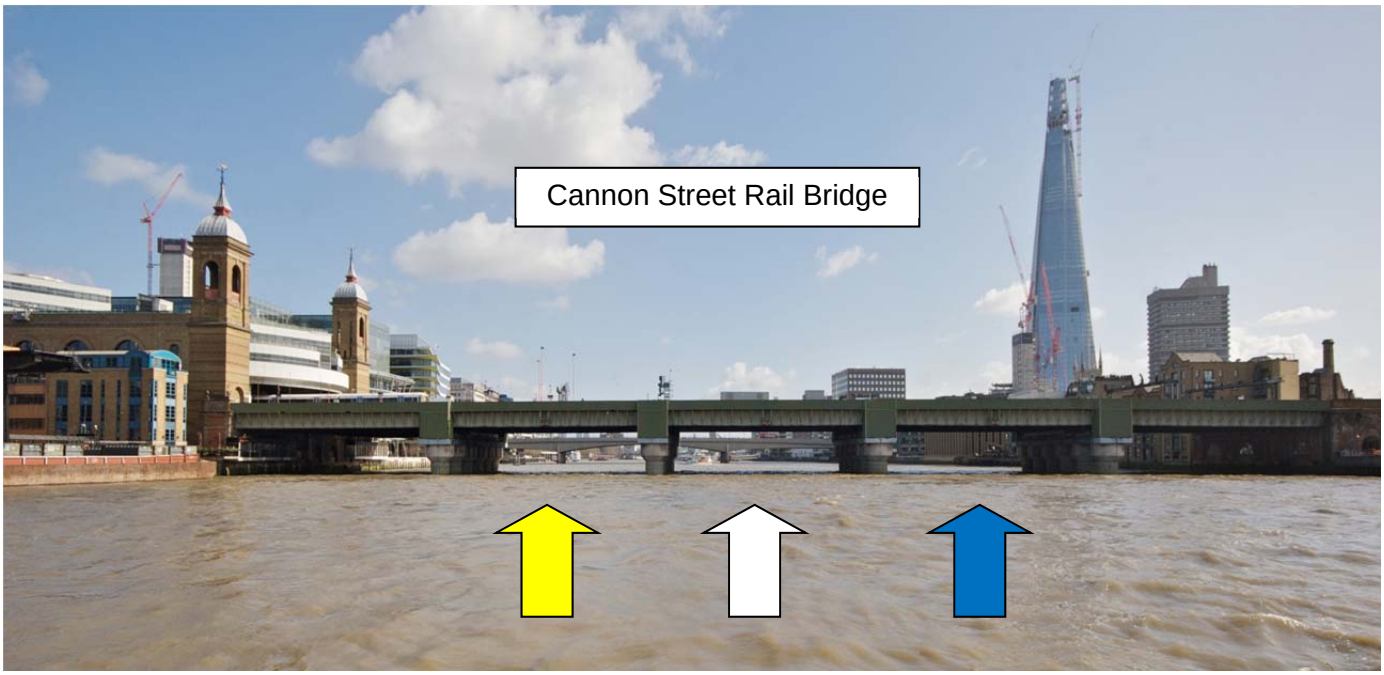


Southwark and Cannon Street Rail Bridges are close together and Southwark Bridge causes a dog-leg approach to Cannon Street Rail Bridge, care is necessary when navigating downstream with the tide.

Approaching Southwark Bridge the ebb tide set you north, but immediately before entering the Bridge arches it then sets you southerly and this southerly effect continues until you are clear of Cannon Street Rail Bridge.

Ample water exists in Arches 2, 3 and 4, Diamond Jubilee vessels are not to use Arches 1 and 5.

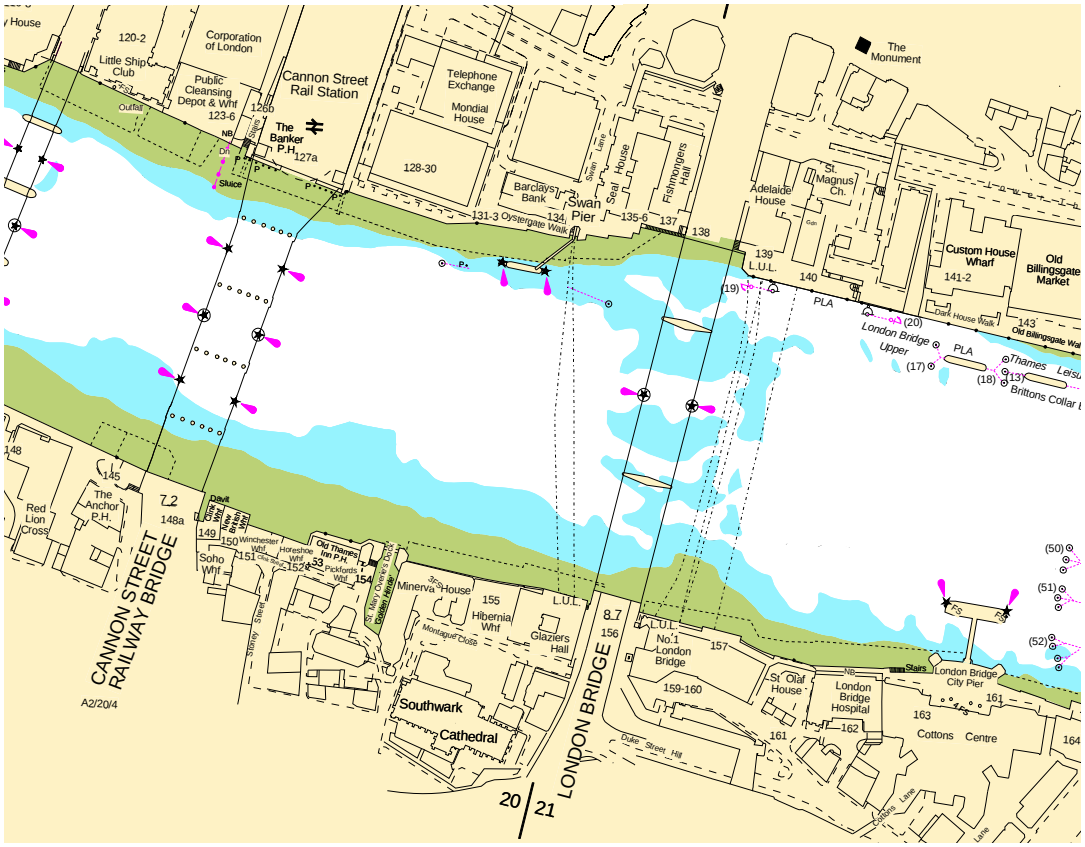




London Bridge	Remarks:- Depths included in Blackfriars Road/Rail Bridges depths.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)				
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

London Bridge	Remarks:- All vessel columns to use No. 2 arch.			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	11.5m.	15.0m.	11.0m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

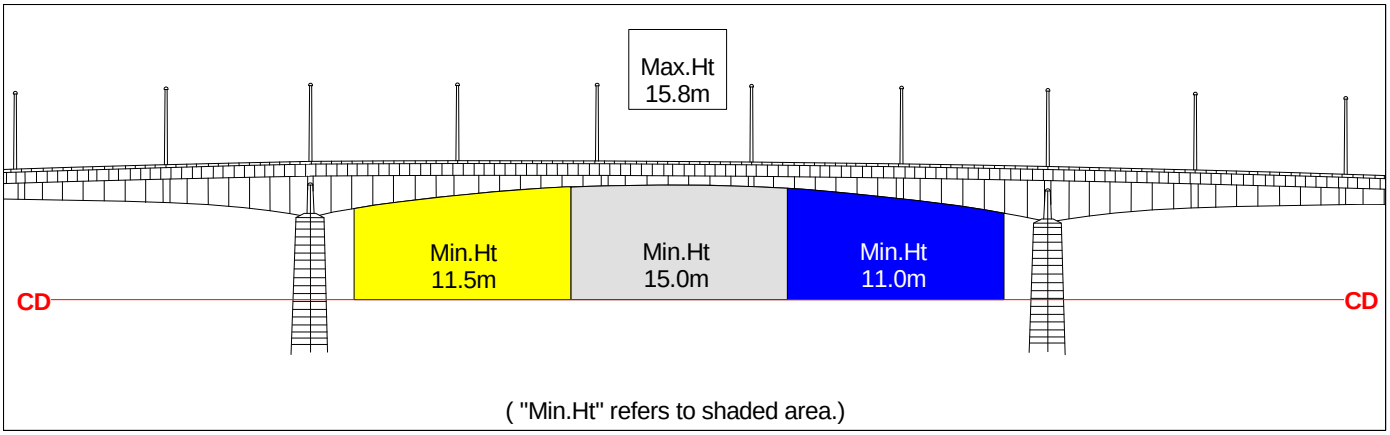
Cannon Street Rail to London Bridge



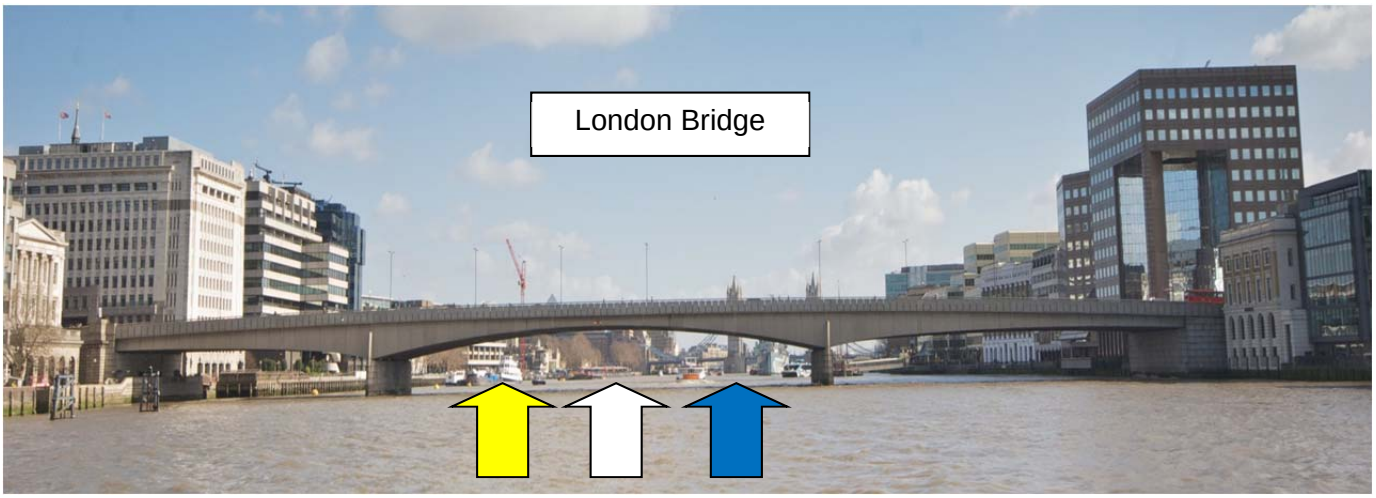
Diamond Jubilee vessels are to **use the centre arch only**, Ample room exists in this arch: almost 100 metres wide.

If a wind against tide situation (Easterly wind) exists a standing wave may develop immediately downstream of London Bridge.

In any event the water below London Bridge is often surprisingly rough and especially so whenever the wind is in the east.



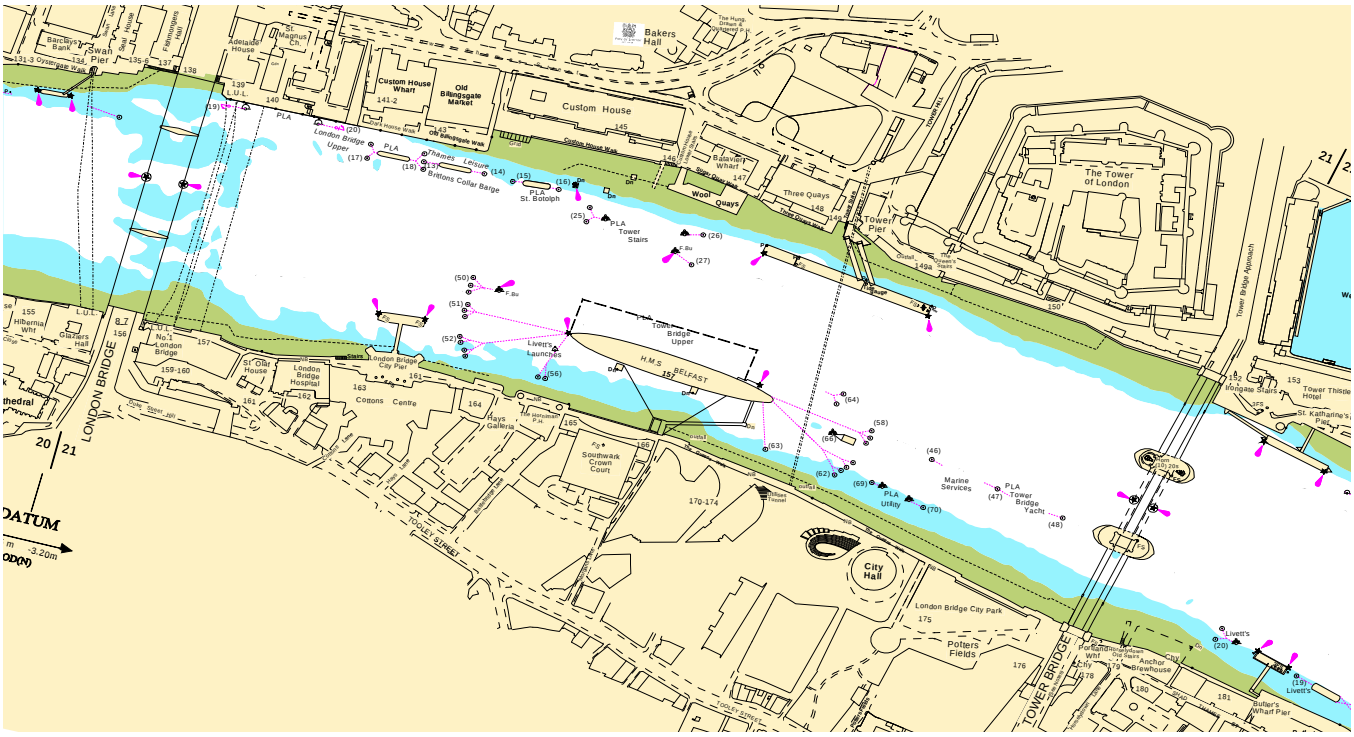
("Min.Ht" refers to shaded area.)

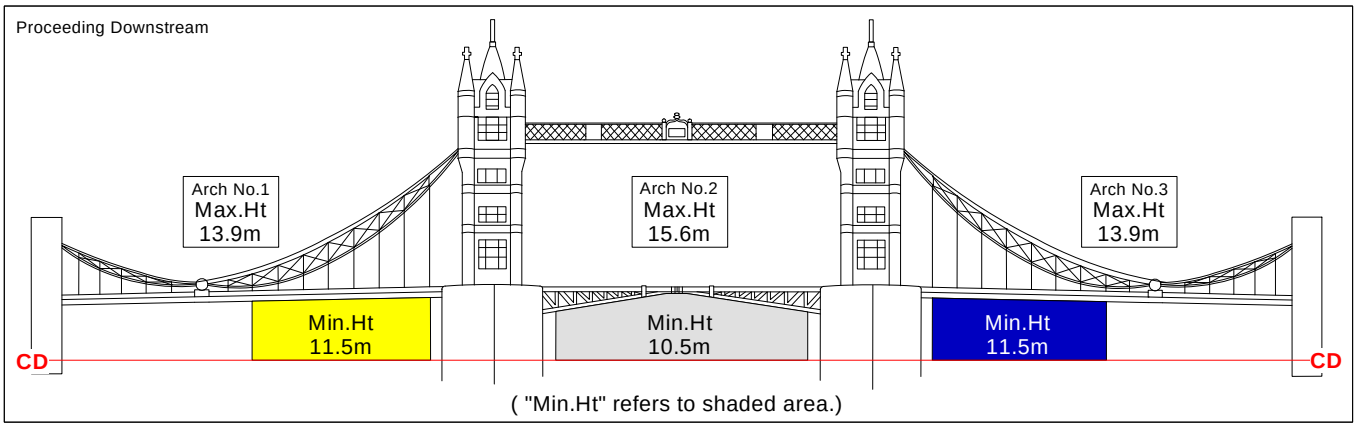


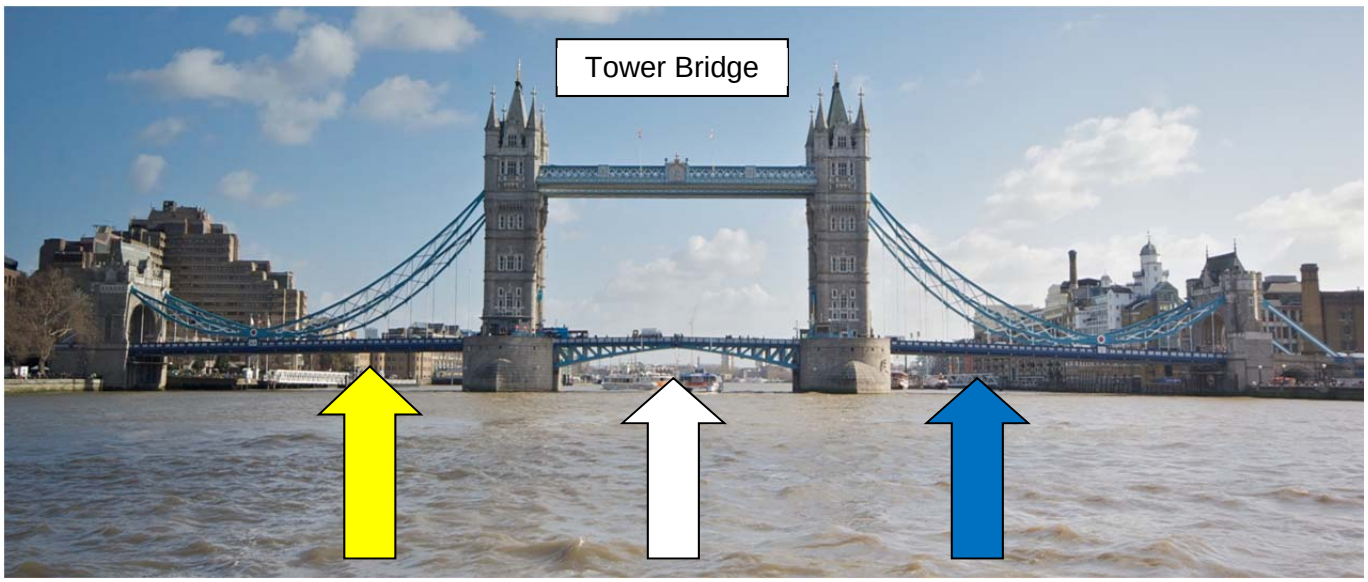
Tower Bridge	Remarks:-			
Time of Transit:	North column	Centre column	South column	Own Remarks
Min. Charted Depth (m)	1.5m.	1.7m.	1.7m.	
Tidal Height @ transit time				
Sum				
Minus Own vessels Draft				
Under Keel Clearance				

Tower Bridge	Remarks:- Port vessel column keeps to the South side of No.1 arch. Centre vessel column uses full width of arch (headroom given is with Bascules closed) Stbd. Vessel column keeps to North side of No. 3 arch			
Time of Transit:	North column	Centre column	South column	Own Remarks
Stated working headroom (m)	11.5m.	10.5m.	11.5m.	
Tidal Height @ transit time				
Subtract tide from headroom				
Minus Own vessels AirDraft				
Headroom Clearance				

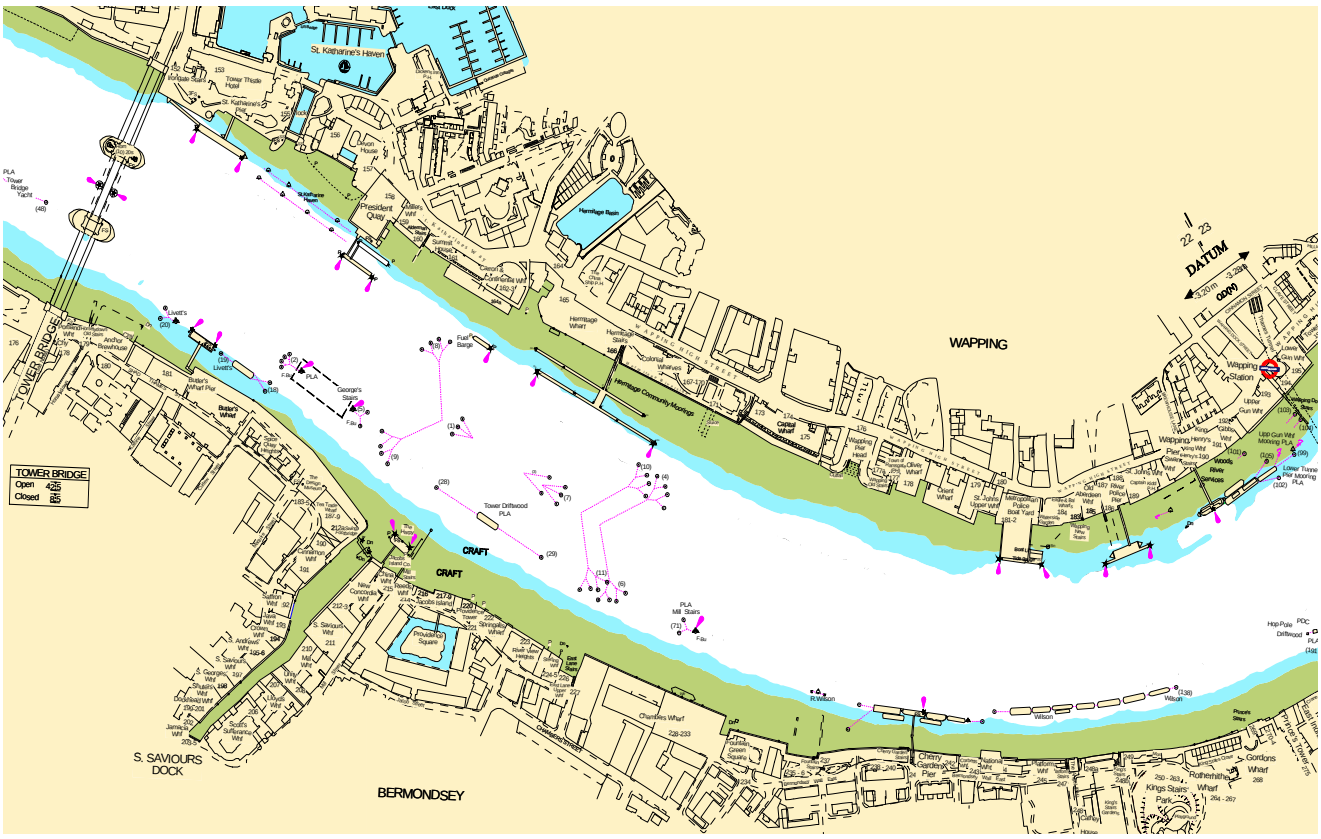
London Bridge to Tower Bridge



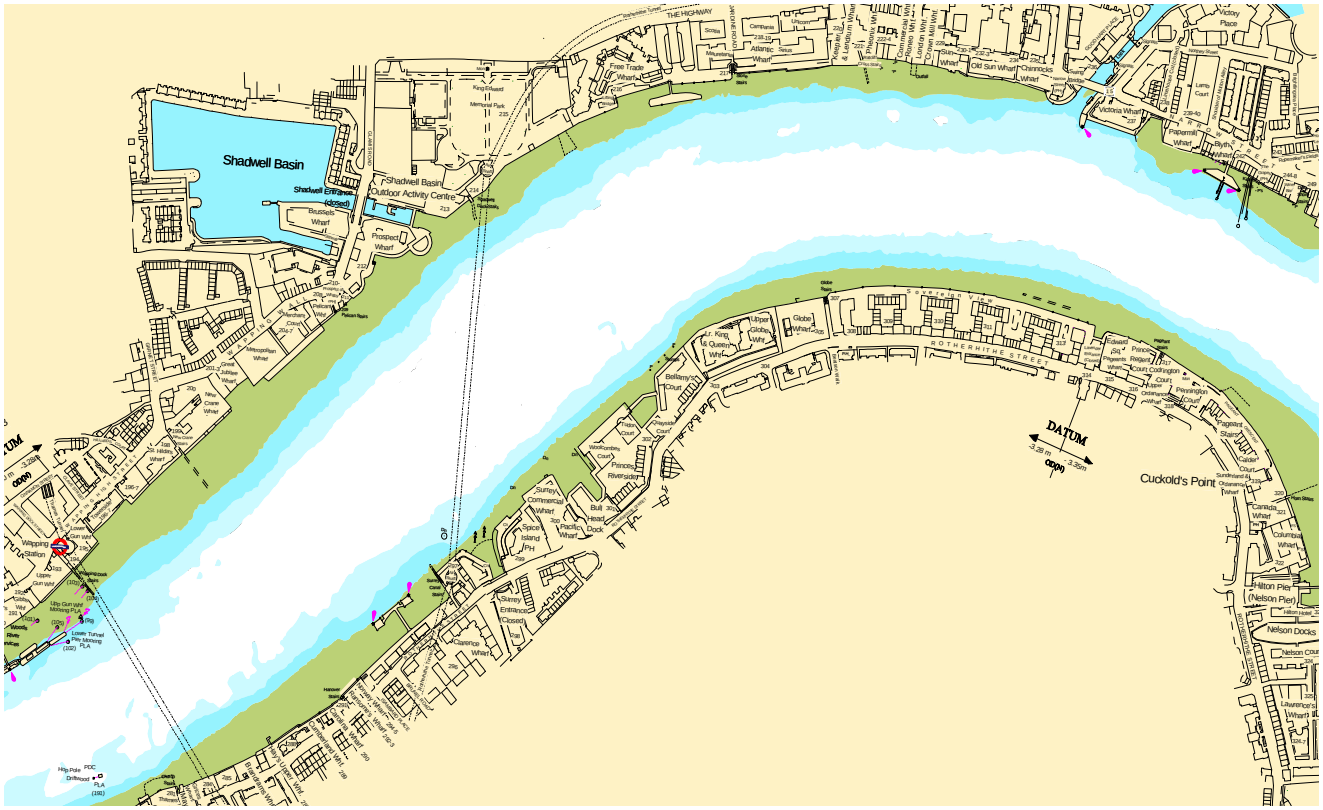




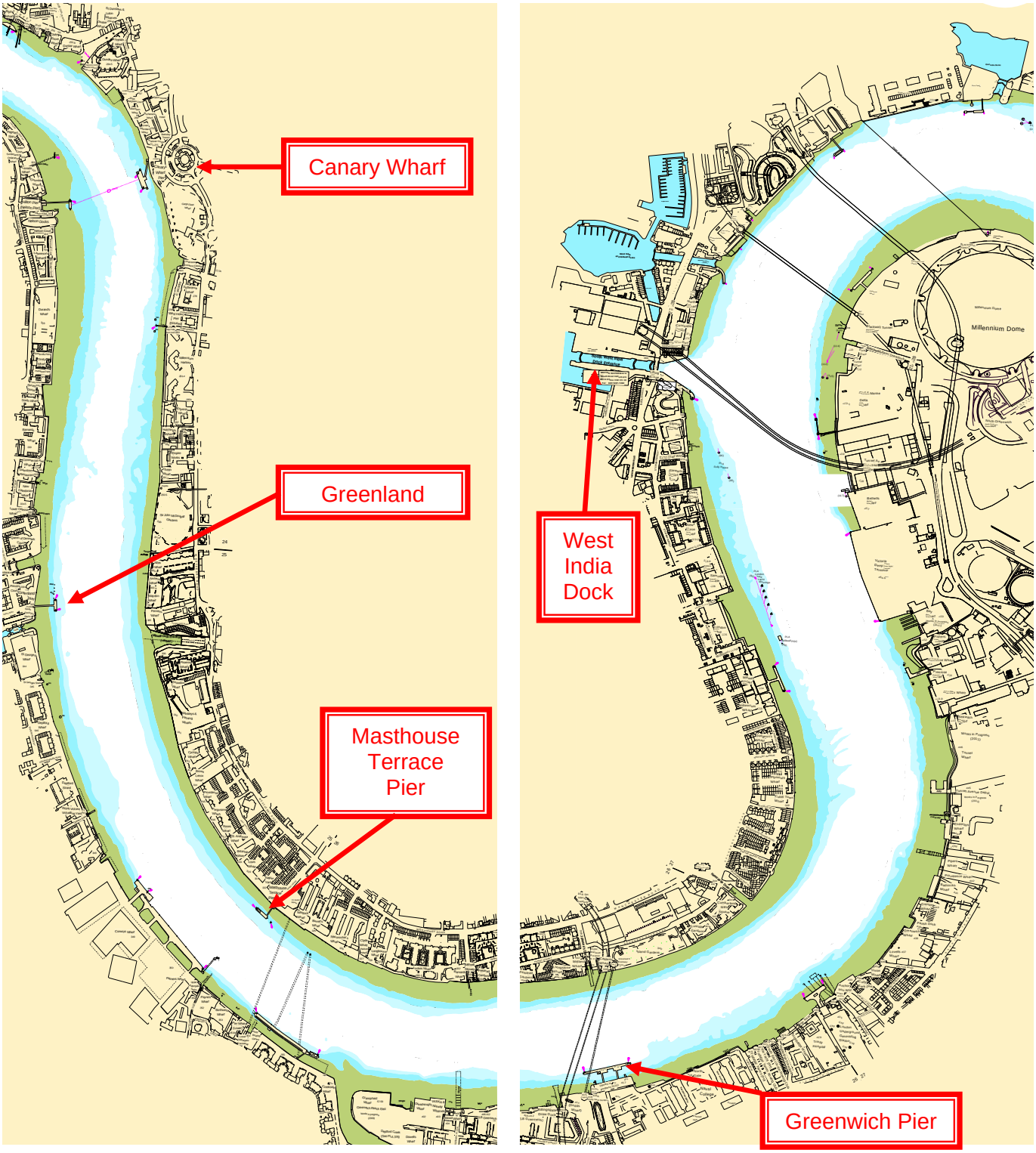
Tower Bridge to Wapping Ness



Wapping Ness to Cuckolds Point



Cuckolds Point to Blackwall Point



The intention is to have the Thames Tidal Barrier closed prior to, during and after the Pageant, the exact times will be promulgated through the usual channels.
This closure will have the effect of maintaining a relatively stable level and a much reduced tidal flow. However it is expected that there will still be some movement of water above the barrier, the effect of which may be exacerbated by meteorological effects prior to and during the Pageant.

The table below gives predicted tidal heights at each bridge with the Thames Tidal Barrier closed. This information does not relieve masters of Pageant vessels of their obligation to make themselves aware of the latest tidal height information. Tidal height is reported every half hour at 15 and 45 minutes past the hour, by London VTS on VHF Channel 14.

Bridge	Tidal height
Hammersmith Bridge	2.7m.
Putney Bridge	3.0m.
Fulham Rail Bridge	3.0m.
Wandsworth Bridge	3.1m.
Battersea Rail Bridge	3.1m.
Battersea Road Bridge	3.3m.
Albert Bridge	3.3m.
Chelsea Bridge	3.4m.
Victoria Rail Bridge	3.4m.
Vauxhall Bridge	3.6m.
Lambeth Bridge	3.7m.
Westminster Bridge	3.9m.
Charing Cross Bridge	3.9m.
Waterloo Bridge	3.9m.
Blackfriars Road + Rail	4.1m.
Southwark Bridge	4.1m.
Cannon Street Bridge	4.1m.
London Bridge	4.2m.
Tower Bridge	4.2m.

Putney			Wandsworth			Westminster	
51°28'N 0°13'W UK			51°28'N 0°11'W UK			51°30'N 0°07'W UK	
Predictions are based on Chelsea Bridge			Predictions are based on Chelsea Bridge			Predictions are based on LONDON BRIDGE (TOWER PIER)	
Predictions based on manually entered differences			Predictions based on manually entered differences			Predictions based on manually entered differences	
TIMES BST 03/06/2012			TIMES BST 03/06/2012			TIMES BST 03/06/2012	
12:00	3.6 m		12:00	4.0 m		12:00	5.1 m
12:10	3.8 m		12:10	4.2 m		12:10	5.3 m
12:20	4.0 m		12:20	4.4 m		12:20	5.5 m
12:30	4.2 m		12:30	4.6 m		12:30	5.7 m
12:40	4.5 m		12:40	4.8 m		12:40	5.9 m
12:50	4.7 m		12:50	5.0 m		12:50	6.1 m
13:00	4.9 m		13:00	5.3 m		13:00	6.3 m
13:10	5.1 m		13:10	5.5 m		13:10	6.4 m
13:20	5.3 m		13:20	5.6 m		13:20	6.6 m
13:30	5.5 m		13:30	5.8 m		13:30	6.6 m
13:40	5.6 m		13:40	5.9 m		13:40	6.7 m
13:50	5.7 m		13:50	5.9 m		13:50	6.7 m
14:00	5.8 m		14:00	5.9 m		14:00	6.6 m
14:10	5.8 m		14:10	5.9 m		14:10	6.5 m
14:20	5.8 m		14:20	5.8 m		14:20	6.4 m
14:30	5.7 m		14:30	5.7 m		14:30	6.2 m
14:40	5.6 m		14:40	5.5 m		14:40	6.0 m
14:50	5.5 m		14:50	5.4 m		14:50	5.7 m
15:00	5.3 m		15:00	5.2 m		15:00	5.5 m
15:10	5.2 m		15:10	5.0 m		15:10	5.3 m
15:20	5.0 m		15:20	4.8 m		15:20	5.1 m
15:30	4.8 m		15:30	4.7 m		15:30	4.8 m
15:40	4.6 m		15:40	4.5 m		15:40	4.6 m
15:50	4.5 m		15:50	4.3 m		15:50	4.4 m
16:00	4.3 m		16:00	4.2 m		16:00	4.2 m
16:10	4.1 m		16:10	4.0 m		16:10	4.1 m
16:20	4.0 m		16:20	3.8 m		16:20	3.9 m
16:30	3.8 m		16:30	3.7 m		16:30	3.7 m
16:40	3.7 m		16:40	3.5 m		16:40	3.5 m
16:50	3.5 m		16:50	3.3 m		16:50	3.4 m
17:00	3.4 m		17:00	3.2 m		17:00	3.2 m
17:10	3.2 m		17:10	3.0 m		17:10	3.0 m
17:20	3.1 m		17:20	2.9 m		17:20	2.9 m
17:30	2.9 m		17:30	2.8 m		17:30	2.7 m
17:40	2.8 m		17:40	2.6 m		17:40	2.6 m
17:50	2.7 m		17:50	2.5 m		17:50	2.4 m
18:00	2.5 m		18:00	2.4 m		18:00	2.3 m

Predicted Heights are in metres above Chart Datum.

Live Tidal heights are reported every half hour at 15 and 45 minutes past the hour, by London VTS on VHF Channel 14