

MUTFORD LOCK,

Mutford Road Bridge (lifting) and **Carlton Railway Bridge** (swing bridge; aka **Mutford Railway Bridge**)

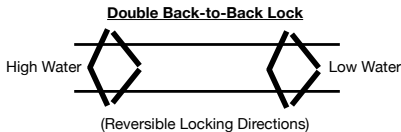
Mutford Lock connects Lowestoft Harbour and the North Sea with Oulton Broad.

Approached from the east through Lake Lothing which is controlled by Associated British Ports (ABP) as harbour authority, vessels first encounter the railway swing bridge, which is owned and controlled by Network Rail.

While the railway bridge across Lake Lothing (the **Carlton Railway Bridge**) on the Lowestoft-Ipswich line is located parallel to the A1117 road bridge (the **Mutford Road Bridge**), it operates independently of the road bridge.

The clearance of the Carlton Railway Bridge is 4.57m at Average High Water During Summer. Openings of the Railway Bridge are arranged with the Oulton Broad Harbour Master when requesting passage through Mutford Lock. Currently, the Railway Bridge requires a group of workers, called up from Ipswich, to operate the opening machinery manually. As a result, until the electric motor is repaired or replaced, the bridge will open at 11:30am by appointment on Tuesdays and Thursdays only. Opening of the Railway Bridge must be booked with Oulton Broad Harbour Master (obys@eastssuffolk.gov.uk) at least 24 hours in advance. Within the small tidal pool between rail and road bridges sits a short 35m waiting pontoon without land access; this normally permits craft having passed through the Railway Bridge to moor while awaiting the Mutford Road Bridge to open.

The Mutford Road Bridge, a lifting bridge whose clearance is 2.39m at Average High Water During Summer, is operated by Oulton Broad Yacht Station personnel who also operate Mutford Lock. A pontoon wait may be unexpectedly long since this bridge is operated in synch with a railway level-crossing some 400m northward on the Lowestoft-Norwich line; this in order to minimise road traffic hold-up. Mutford Lock is owned by the Broads Authority and operated under contract with East Suffolk Council (ESC), again by the same yacht station staff.



The lock is unique within the British Isles as the only operating *double-back-to-back* arrangement. There are eight half-gates operating in pairs such that when freshwater is highest on the Broads side, one pair acts as the dam and the other as its locking partner, with the other two 'downhill' pairs redundant; once in each half-tide cycle the opposite saltwater is the higher and the locking arrangement has to be reversed. Additionally, since freshwater tidal range is considerably smaller than the saltwater range, the pairs pointing towards the saltside are about 0.8m taller than the other pairs. Thus the freshwater of Oulton Broad is retained to maintain the navigation, and in converse potential flooding is prevented of saltwater from Lake Lothing destroying the independent landward habitat.

The passage is not available to hire craft; it has safe usable dimensions of 22m x 6.5m.

Vessels up to 2m draught will be able to enter the passage at mean low water springs.

Oulton Broad tide is approximately 4hrs after Great Yarmouth with a mean range of 0.7m, while the Lake Lothing mean range is ~1.8m.

In the season, given 24 hours notice by VHF or telephone, staff will normally remain until 19:30 (this allows inbound craft from North Sea to use the 18:00 Lowestoft Bridge opening).

Craft intending to travel into the Broads system will be confined by the further constraints of fixed bridges at Haddiscoe, St Olaves and Beccles where clearance at Average High Water During Summer is no more than 7.32m, 2.44m and 3.66m respectively.

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Aerial of Mutford Lock to Carlton Railway Bridge – courtesy of Mike Page – www.mike-page.co.uk

Mutford Lock and Road Bridge opening times

24hr advance booking is strongly encouraged.

Season Openings 1 April to 31 October: 08:00 – 12:00 & 13:00 – 17:00

Winter Openings 1 November to 31 March: 08.00 – 12.00

Contact: VHF Channel 73, callsign "Mutford" or "Oulton" or call 01502-531778 (LOCK), 01502-574946 (YACHT STATION), 07572 039790 (HOME STAFF; please respect timing). **Cost:** £17 single transit (includes same-day return).

LOWESTOFT HARBOUR

International Collision Regulations apply to all craft, who are requested to make contact with Harbour Control on VHF Channel 14 or by phone 01502 572286. Sailing vessels and (if under 20m) other vessels must not impede larger vessels only able to navigate within a narrow channel. All vessels must observe the International Port Traffic Signals located on the South Pier extension and in the Yacht Marina – three vertical red lights: vessels shall not proceed; green, white, green vertical lights: vessels may proceed **with specific consent**; this applies to both entering and leaving harbour

See the port's Notices to Mariners on its website www.abpmarine.co.uk/Marine/Short_Sea_Ports/Lowestoft/Notices_to_Mariners/ (view of harbour is shown below).

Visitor moorings are available at the Royal Norfolk and Suffolk Yacht Club (RNSYC) Marina. All vessels entering and leaving should proceed with extreme caution, due to restricted visibility, and obey the light signals and permissions described above. No craft should attempt to leave the Marina without first obtaining clearance from Harbour Control, and must obey the exit signals on the east side of the Marina entrance. The speed limit in the harbour is four knots.

Lowestoft Harbour Bridge When this lifting bridge is closed, there is a clearance at mean high water springs of 2.16m at the centre of the arch.

This road bridge will not open during rush hours and prior arrangement is required with Lowestoft Harbour Control on VHF Channel 14 or telephone 01502 572286. There is a Waiting Pontoon in the south east corner of the Trawl Dock (opposite the RNSYC).

Pleasure craft may be required to form 'flotillas' to pass under the bridge.

Bridge openings may take place at 10 specified times (11 at weekends) every 24 hour-period, subject to 20 minutes notice. Navigation in the bridge channel is controlled on Channel 14 and by red and green-white-green lights on the bridge. General port details are available from plans D and E on Admiralty chart 1535 and see www.lowestofthavenmarina.co.uk/navigation for further details regarding transit.

An additional lifting bridge, inland from the **Lowestoft Harbour Bridge** has an airdraft of 12m. It is known as the 'Gull Wing Bridge' due to its configuration. For navigational details about the bridge and its opening times, contact Lowestoft Harbour Control (above).



Aerial of Lowestoft Harbour – courtesy of Mike Page – www.mike-page.co.uk