

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.

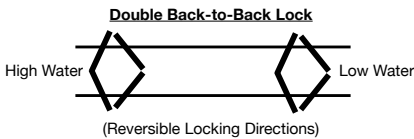
Openings of the Railway Bridge must be arranged with the Oulton Broad Harbour Master when requesting passage through Mutford Lock, and must be booked at least 24 hours in advance. Telephone 01502 574946 or VHF Ch 73 (obys@eastssuffolk.gov.uk).

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

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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).