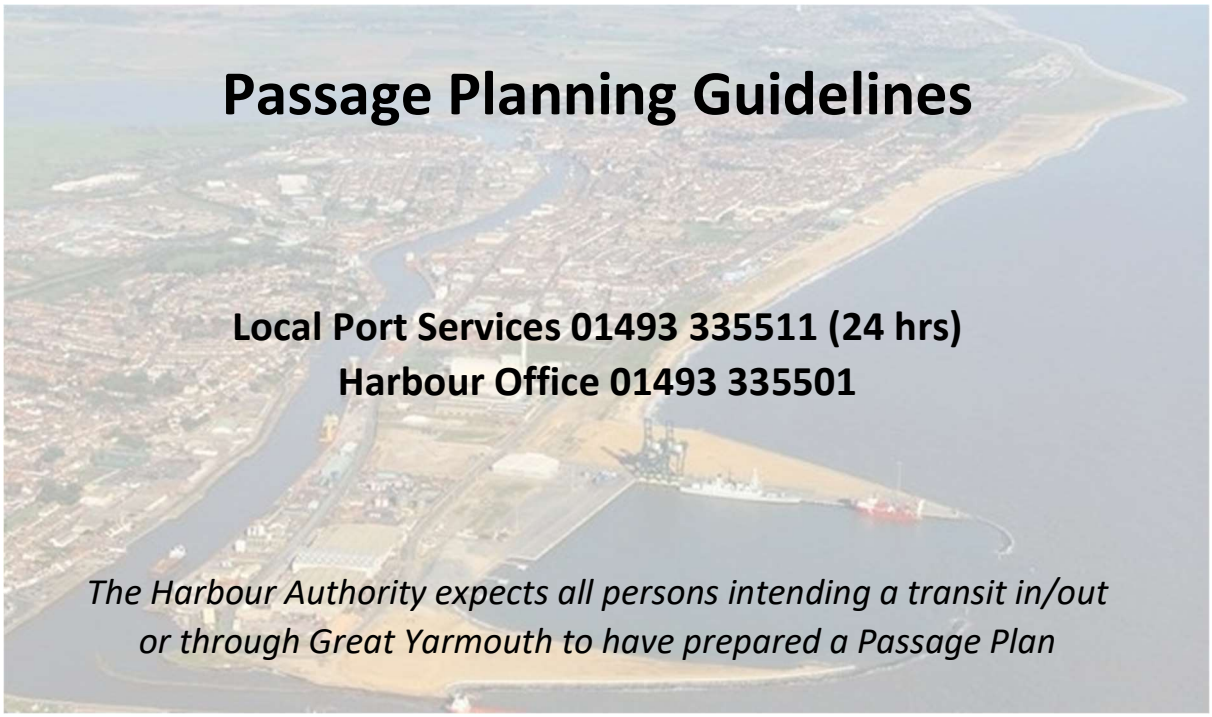


Passage Planning Guidelines

Local Port Services 01493 335511 (24 hrs)
Harbour Office 01493 335501

The Harbour Authority expects all persons intending a transit in/out or through Great Yarmouth to have prepared a Passage Plan

GreatYarmouthHarbourOffice@peelports.com
GreatYarmouthMarine.Services@peelports.com

www.peelports.com

Vanguard House, South Beach Parade, Great Yarmouth, Norfolk, NR30 3GY

Passage Plan Preparation

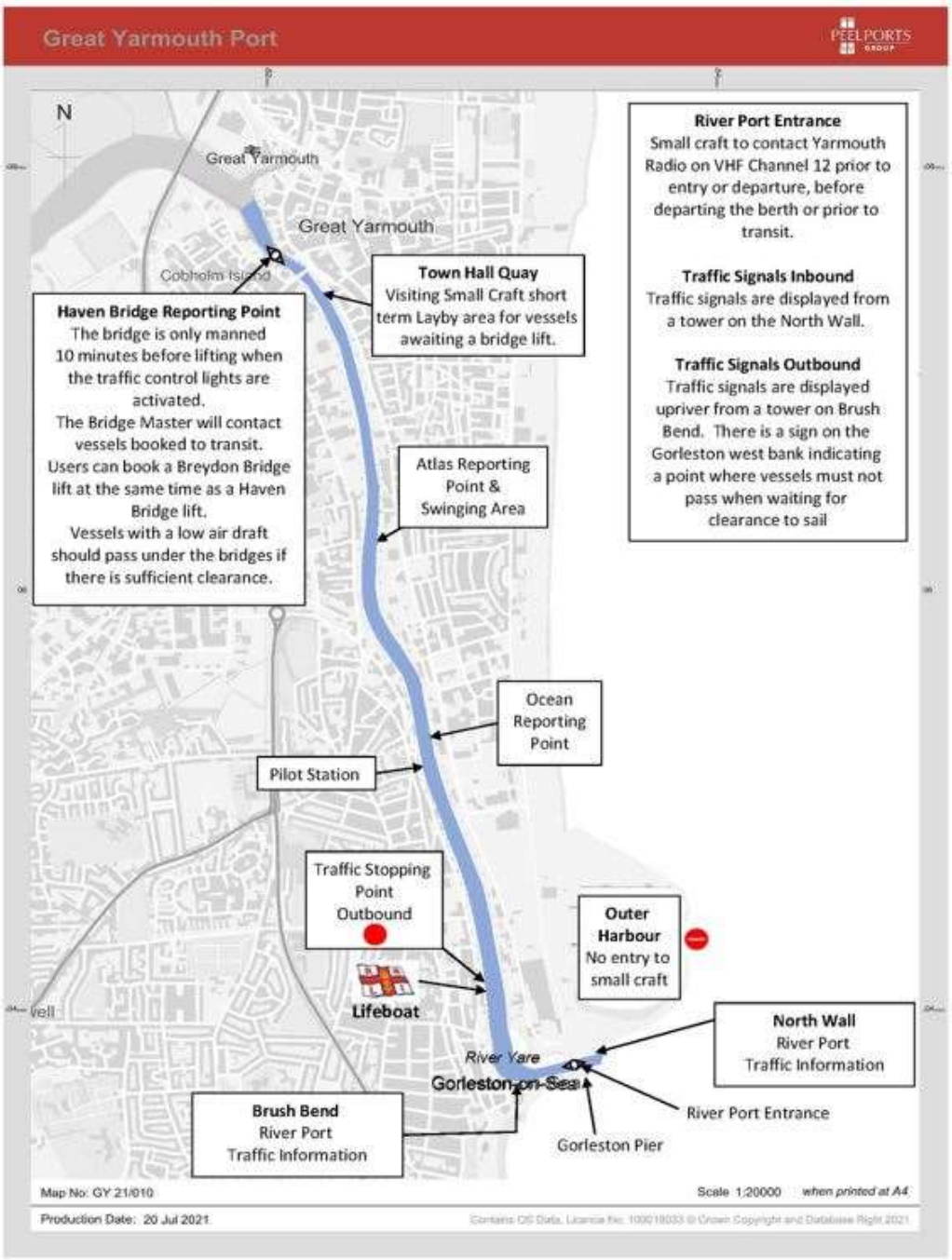
Mariners are recommended to consult:

1. Admiralty Chart 1534 – Great Yarmouth & Approaches
2. PPGY Port Charts
3. Admiralty Sailing Directions

On Passage Requirements

Communications

All vessels/craft should contact Local Port Service (VHF Ch12, Callsign Yarmouth Radio). Any defects to a Vessel, likely to affect safety of navigation must be reported to LPS.



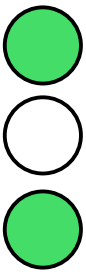
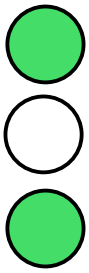
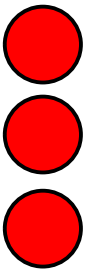
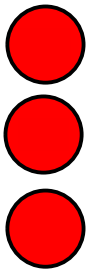
There are four compulsory Vessel Reporting Points within the river:-

1. River Mouth
2. Ocean Terminal (Berth 07)
3. Atlas Terminal (Berth 15)
4. Haven Bridge

Traffic Information

The entrance to both harbours have Port Entry Light Signals to inform decisions on vessel movement. Vessels should observe the traffic lights and seek information of anticipated vessel movements from LPS before proceeding. Prior to any vessel movement (inbound, outbound or shifting) vessels must contact LPS to advise their intentions.

LPS will advise Mariners of any vessels moving in the port, on meteorological and other important information requiring addition attention.

RIVER PORT TRAFFIC SIGNALS	
INBOUND VESSELS (Exhibited from the tower on the North Wall)	**OUTBOUND VESSELS** (Exhibited from tower in Brush Bend – Gorleston Side)
OCCULTING LIGHTS SHOWING TO SEAWARD	**OCCULTING LIGHTS SHOWING UPRIVER**
Vessels may only approach the entrance and proceed inward when specific advice to do so has been received (Occulting 12 secs) 	Vessels may proceed outward only when the specific advice to do so has been received (Occulting 12 secs) 
Vessels not to approach entrance (Occulting 12 seconds) 	Vessels not to approach Brush Bend or entrance (Occulting 12 secs) 
Vessels may proceed if safe to do so (Occulting 12 secs) 	Vessels may proceed outwards if safe to do so (Occulting 12 secs) 

FLASHING LIGHTS SHOWING TO SEAWARD	FLASHING LIGHTS SHOWING UPRIVER
Emergency Port Closed (Flashing 2 seconds) 	**Emergency** Port Closed (Flashing 2 seconds) 

Vessel Conduct

International Regulations for Preventing Collisions at Sea 1972 (COLREGS) apply, together with Byelaws (copy is available on the website).

Speed in the Harbour - vessels should maintain a safe speed at all times. Maximum speed 7 knots or less may be appropriate and take care with vessel wash. Avoid causing a nuisance to other vessels either moored or underway and pay particular attention to small craft alongside in the river.

Short Term Waiting Berths

Berths may be available for small craft/vessels wishing to remain alongside awaiting a bridge lift. Berth 21H (Town Hall Quay) is close to the Town Centre, a five minute walk along Regent Street to the Market Place. Minimum depth alongside is 2.4m (CD). This berth has vertical wooden fenders and mooring tails. Recommend Vessels deploy their own fenders. Approaching the berth due care should be taken to allow for tide, especially on the flood which will set vessels upriver towards Haven Bridge. Vessels should moor adjacent to the access ladders and ensure their safe access means is adequate. A listening watch on VHF Channel 12 will enable receipt of shipping movements in the vicinity of your vessel.

Shifting on Berths

Vessels may be permitted to warp a short distance along a berth without employing the services of a Pilot, subject to prior consent of the Harbour Office contactable via LPS.

Vessel Lay-Up

All requests for Vessel Lay-Up should be directed to the Harbour Office and provided adequately in advance of an intended Arrival.

Environmental Information

Tidal Surges

The Port area is subject to Tidal Surges, usually but not always between November and March, caused by a combination of climatic conditions affecting the Southern North Sea. A surge may cause Water levels in the Port to vary 2m above and 1m below predicted tide heights. In very extreme cases, there may be overtopping of a quay wall.

Tidal Streams

One mile north-east of the port entrances the tidal streams set as follows:-

HW = High Water, LW = Low Water

Time from HW Dover	Remarks
+0600	South-going stream begins. Spring rate 2¼ knots
-0020	North-going stream begins. Spring rate 2¼ knots

Off Brush Quay the tidal streams set as follows:-

Local Tidal Times	Remarks
Local LW +2 hrs	Ingoing stream begins. It can exceed 2-3 knots except at Haven Bridge where it can reach 3-4 knots
Local HW +1½ hrs	Outgoing stream begins, normal rate 3-4 knots but can reach 6 knots

Note: The tidal streams begin later upriver.

Flood Tide

Inside the offshore banks, the South-going stream (flood) tends to run parallel to the shore line. Closer inshore the stream is deflected along the Outer Harbour north breakwater arm, after passing the end of the breakwater arm the stream swings South again past the Outer Harbour entrance, accelerating as it does so and re-joining the main southerly stream. There is a tidal flow into the Outer Harbour but the tidal currents inside the breakwater entrance are weak. These follow a clockwise rotation within the basin on the Flood tide and counter-clockwise on the Ebb. Vessels entering the Outer Harbour approach from the east counteracting the tide so that the vessel is making good a course that will take them through the Outer Harbour entrance.

Masters should be aware that when inbound passing through the entrance the vessel will lose the strong tidal flows that were being experienced outside the breakwaters. This may tend to swing the vessel, as part of the vessel will be in the tidal stream and part in near still water. Once through the entrance action will need to be taken to counteract any swing and to take way off the vessel.

During the early period of the South-going stream, the stream passing the Outer Harbour entrance then follows the Outer Harbour South breakwater and enters the River Port, with part of the stream continuing south and south west past the Gorleston Pier and along the coast. After the first hour, the stream has increased in rate and more of the flow continues South and Southwest passing the River Port entrance before turning inshore and then North-westerly past and into the River Port entrance. As the strength of the stream increases further the flow has a more Northerly component that runs strongly past the River Port entrance and then splits as it encounters the North wall of the entrance with part continuing to flow into the river and part forming an eddy current that runs to the East along the Southern arm of the Outer Harbour breakwater before turning South and joining the South-going stream. Vessels can experience a strong set to the North from 1-2 cables off the river entrance with the strength of the Northerly set increasing as the vessel closes the entrance. Vessels should take care to take appropriate action to counteract this set. These sets are much stronger during the spring tidal cycle.

Ebb Tide

The outgoing stream (Ebb) runs out of the River Port entrance and along the Outer Harbour south breakwater arm before joining the main North-going stream. Before the main coastal stream has gathered pace a part of the outgoing stream at the River Port entrance has a South-easterly component that joins the North-easterly going coastal stream that runs just south of the Gorleston Pier. At the peak of the Northerly stream an area of confused eddies can develop just South of the South breakwater arm outside of the River Port entrance. These eddies disappear or are poorly developed when the streams are weaker. Vessels entering the River Port from the East can stem the outgoing Easterly stream, running along about 0.5 cables South of the South breakwater watching for any element of a Northerly set. If entering from the Southeast vessels will be set to the North until the vessel encounters the outgoing stream when the Northerly set will reduce. Once through the entrance vessels should stem the outgoing stream and adjust speed and heading in preparation for rounding Brush Bend. Vessels entering the Outer Harbour during the North-going stream use the same approach method as used for the flood tide.

During and after heavy rain the duration and rate of the out-going stream from the River Port is increased and the ingoing stream correspondingly reduced. Under these circumstances, on occasions, the outgoing stream may attain 5/6 knots off Brush Quay and there may be a continuous out-going stream for 18 hours; the range of tide in these conditions will generally be reduced.

Weather Condition	HW Slack	LW Slack	Tidal Height
Northerly wind	Later	Earlier	Increased
Southerly wind	Earlier	Later	Decreased
Heavy Rainfall	Earlier	Later	Increased

Slack Water

Time of slack water does not coincide with HW/LW. Slack water normally occurs at local HW+1½ and LW+1½ to +2 hours. Prolonged strong winds or heavy rainfall may cause these times to vary and also alter the tidal range by more than 1m. The following can be expected:

Craft with limited power are recommended to enter the river around Low Water Slack. Tidal flows within the river can be challenging. Tidal Rates of up to 4kts (Flood) and 5-6kts (Ebb) frequently occur especially during winter months. Strong or sustained winds with Easterly component may cause a steep, confused sea at the river entrance; especially on Ebb tides

Tidal Predictions

Mariners may access details of predicted tides on the Web Site

Tide Gauges

Tidal height (Live) readings for OH and River are provided on this site

Tide Boards

Boards are located at Outer Harbour (North Terminal), Brush Bend (Skeleton Works), Pilot Station and Haven Bridge (up and downriver side).

Air Draft boards are located at Haven Bridge.

Mean Tidal Heights (relative to Chart Datum)

MHWS: 2.71 metres
MHWN: 2.23 metres
MLWN: 1.23 metres
MLWS: 0.75 metres

Mean Tidal Range

Neaps:	1.0 metres
Springs:	1.96 metres

Wind and sea conditions

Prevailing winds are South Westerly and live readings are available on this site. Prolonged exposure to Easterly and South Easterly winds produce the largest sea and swell conditions in the Port approaches. This can cause confused sea state, experienced particularly during periods when the direction of wind is against tide. At such times, care should be exercised when navigating in the approaches and entrances to the harbour.

Seaward Approaches

Both the Outer Harbour and River Port can be approached from the North or South. The main approach is via the Holm Channel lying to the South East of the harbour entrance.

The limiting depth in the Holm Channel is 10.4 metres within the buoyed channel. From the North through the Cockle Gateway, the limiting depth is 9.6 metres (2020). There is a shallower route to the South through the Stanford Channel.

In the approaches to the Outer Harbour there is a minimum depth of 9.7m approximately 6 cables ESE from the Outer Harbour entrance.

The controlling depth in the approach and entrance to the River Port is 4.8 metres, but depths are subject to change and temporary shoaling can occur after strong easterly or south easterly winds.

Anchorages

Mariners are advised to consult the latest edition of the Admiralty Sailing Directions NP54. A suitable anchorage may be found in any part of Caister and Yarmouth Roads; depths of 10 to 24 metres in sand, shells, stones and shingle. Keep clear of the Spoil ground, submarine cables and other charted obstructions. Except in emergency, vessels must ensure that they do not anchor within Port limits or the approaches to the Port entrances.

Approaches to Outer Harbour

The Outer Harbour entrance lies on the seaward side of the South Denes peninsula 4 cables (740 metres) northeast of the River Port entrance. The Outer Harbour basin is approximately 450 x 500 metres, the entrance is 150 metres wide and is approached from the East. The

harbour entrance is marked by red and green lateral marks exhibited from lighthouse towers positioned each side of the entrance close to the edge of the entrance caissons.

River Port Entrance

The River Port entrance is formed by the mouth of the River Yare, with Gorleston Pier to the south and to the north, the northern training wall (North Wall) and the western end of the Outer Harbour southern breakwater. From the entrance the river leads about 2½ cables west and then turns abruptly north at Brush Bend to open up the Haven for a distance of 2 miles to the Haven Bridge. Commercial berths are on the eastern side of the river as far as Berth 10 (cross river electrical cables) and then on both sides of the river thereafter. Most of the commercial berths in the river Port have the berth number displayed. There are no mooring bollards on the western side of the river from Brush Bend to the Pilot Station at Mission Quay and mooring in this area is not permitted.

Landmarks

Nelson's Monument	(52°35'.3N, 001°44'.1E)
Power station Chimney	(52°35'.0N, 001°44'.1E)
Brush Lighthouse (disused) red brick tower, 21m Height	(52°34'.3N, 001°43'.9E)
Church (tower)	(52°36'.2N, 001°43'.8E)
Church (tower)	(52°34'.7N, 001°43'.5E)

Submarine Cables and Pipelines

A gas pipeline passes under the riverbed at the south end of the River Yare in the vicinity of Brush Bend. Warning notices (yellow diamonds, black letters) indicate the landing places and the area where it is prohibited to drop anchor.

High voltage power cables, that lie on or close to the river bed surface, cross the river in the vicinity of Berth 10 about 1 mile north of Brush Bend. Yellow diamond beacons mark the extent of the cable area and demark where it is prohibited to drop or drag anchors.

Latest Charts

The Port conducts regular hydrographic surveys of the Outer Harbour and River. The most recent survey data is published on the website. Further advice can be obtained from the Harbour Office and Pilots, if required.

Bridges

There are a number of Bridges located in the Port and its vicinity. The bridges may affect navigation, particularly by small craft transiting to/from the Norfolk Broads. Two of the bridges, Haven and Breydon, are able to Open to facilitate transit. Advance booking is required.

The GY Third River Crossing project will deliver a new Bridge, improving access to and from the Port areas. The bridge will be able to Open on Request. Further details will be published before the bridge construction concludes in 2023.

Entry to the Norfolk Broads from Great Yarmouth

After transiting inland through the Haven Bridge there is a short reach before vessels will enter the Norfolk Broads. A wealth of information can be found at www.broads-authority.gov.uk.

Approximately 3 cables (550 metres) NNW from Haven Bridge lies the confluence of the Rivers Yare and Bure. The Yare runs 3 cables (550 metres) NW, passing under the Breydon Bridge, continuing 3½ miles in a WSW direction across Breydon Water until it meets the Southern end of the River Waveney.

The three rivers provide over 120 miles of inland navigation as far as Norwich (Yare), Coltishall (Bure) and Beccles (Waveney). The Port of Lowestoft can also be reached by this route via Mutford Lock at Oulton Broad.