Docklands Light Railway
Tower Gateway to West India Quay

From Tower Gateway to West India Quay the Docklands Light Railway takes the course of one of London's earliest and most unusual railways, the London and Blackwall Railway.

The London & Blackwall Railway was built between 1838 and 1840, running from Minories by the City Wall to Blackwall Docks some 3½ miles east.

On route it passed close by the Regents Canal Dock, the West India Docks and the East India Dock.

The railway was not initially intended to handle freight - rather it sought to attract large numbers of passengers whose journey from London to the Docks had up until then to be made either by river - slow and often circuitous - or by road, which was even slower.

Before the introduction of the telegraph, all messages had to be conveyed by hand and a continuous stream of clerks, message boys and business men traveled to and from the Docks daily.

Additionally the increasing popularly of the seaside had resulted in a growing number of steamer services from London to Kent and Essex resorts - services which could operate far more cheaply and efficiently if they started from Blackwall.

Two rival schemes were put forward for a railway and these eventually merged into one, with George Stephenson and George Biddell becoming the company's engineers.

Opening on 4 July 1840 the London & Blackwall Railway was for its day a sophisticated rapid system, carried mainly on a 4,020 yard viaduct - the cheapest way of building in a congested urban area - the double tracked railway was cable-hauled using a drum to drum system and 7 miles of hemp rope for each track with winding engines at either end of the line.

Only from Poplar to Blackwall did the railway come first down to ground level and then into cutting.

The track gauge was wider than most other railways, being 5½" and carriages, each with its own guard/brakeman started every fifteen minutes from each terminus.

From Minories to Blackwall a group of carriages started out together and as each station approached, a carriage was detached and releasing the rope gripper, braked to a halt, whilst the rest of the train continued on its way.

For Blackwall to Minories journeys, the rope direction was reversed and the individual carriages returned to the City.

To ensure efficient regular operation, the railway relied upon the newly invented Cooke and Wheatstone electro-magnetic telegraph - one of the first recorded commercial uses of the telegraph system.

Modestly successful from the outset, within two years of opening the railway had extended into the City to Fenchurch Street and was experimenting with goods traffic.

It was however isolated from the rest of the growing London rail network by virtue of its wide track gauge and cable haulage - the cables having a tendency to occasionally twist or snap, despite now being metal, not hemp.

To expand further the railway needed to standardize its equipment. In 1845 Parliament passed an Extension Act for the London & Blackwall Railway, authorising a connection with the Eastern Counties Railway at Bow and the change of gauge and haulage.

The last cable-hauled train ran on 14 February 1849; from then on the London & Blackwall became a conventional railway, expanding and merging to help build the complex rail network of east London and Essex.

Docklands Light Railway

The Docklands Light Railway is a rare development in the British transport scene: a brand new rail system close to the heart of the capital.

No such railway has been built in London for decades.

The project makes extensive use of former railway routes and former railway land in general, providing much interest for industrial archaeologists, railway historians and enthusiasts.

The DLR system is designed to provide a high frequency, high-speed, multi-station link from the City and Stratford to the Isle of Dogs.

When the DLR opens in July 1987, two services will be operated: City – Isle of Dogs (Tower Gateway to Island Gardens), and Stratford – Isle of Dogs (Stratford BR/LRT Station to Island Gardens).

Trains will run all day, every day, from approximately 5.30 am in the morning to midnight, and 7.30 am to 11.30 pm on Sundays.

Planned Standard Services - Monday to Friday

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<tr>
<th>Route</th>
<th>Frequencies in Minutes</th>
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<tbody>
<tr>
<td>City – Isle of Dogs</td>
<td>10 7am 7½ 10</td>
</tr>
<tr>
<td>Stratford – Isle of Dogs</td>
<td>10 7½ 10</td>
</tr>
<tr>
<td>Combined service on Isle of Dogs between West India Quay and Island Gardens</td>
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Weekends

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<tr>
<th>Route</th>
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<tr>
<td>City – Isle of Dogs</td>
<td>10 10 10</td>
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<tr>
<td>Stratford – Isle of Dogs</td>
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Accumulator Tower, Mansell Street

Used to provide hydraulic power to the street level City Goods Station, this red brick tower was built in the 1880s by the Midland Railway and worked until the closure of the station in 1949. Some forty years since the formation of British Rail, the tower still shows in broad white painted letters the name of the London, Midland & Scottish Railway. Much of the surrounding area was used by the railways - the adjacent Tower Gate development is built over the site of Royal Mint Street Goods Station.

East Smithfield Goods Station Viaduct

Built in 1864 this short spur across Royal Mint Street and East Smithfield attempted to connect the London Docks to the railway system, the spur terminating at East Smithfield Goods Station. Although most of the viaduct is now demolished along with the Goods Station, the start of the viaduct and the route of the railway can still be clearly traced.

Leman Street Station

The first wooden station built by the Great Eastern Railway (successors to the London & Blackwall Railway) in 1873 was railed unsafe and never opened. A more substantial structure opened in 1877 but the present remains date from the early 1890s, when the viaduct was widened. Leman Street Station succumbed to a combination of busy tram competition and bomb damage, and closed in 1941.

Accumulator Tower

This octagonal tower and chimney is probably the oldest hydraulic power station in the country. Built in 1852, using steam engines to pump water to a cylinder kept under pressure by a weight case, this powered the docksides cranes in the adjacent Regents Canal Dock.

Shadwell (St George’s East) Station

The original London & Blackwall railway station was on the east side of Watney Street and opened in 1840. With viaduct widening in the 1890s traces of which can still be detected by higher arch undersides and different bridge structures on the north side of the viaduct, the station was rebuilt some eighty yards further east with an entrance off Sutton Street. Both the stations were connected by covered stairs and walkway to the joint East London Railway and Great Eastern Railway Shadwell Station Booking Office in Watney Street. A now disused station entrance can be seen on the north side of the viaduct in Chapman Street.

Limehouse (Stepney East) Station, Commercial Road

Opened in 1840 as Stepney Station. It became a junction station in 1874 with the construction of the line to Bow and Stratford largely rebuilt in 1876 the station retains an early wooden structure on the down platform dating from the 1850s. The London & Blackwall platforms were closed in 1926 with the associated tracks finally being removed in 1962. Now the last stop for trains into Fenchurch Street.

Limehouse Viaduct

Three 67ft arches dating from 1838/40 gracefully span the Regent’s Canal as it enters the dock. Decorative cast iron parapeting and heavy keystones enhance this listed viaduct. For a period from 1848 when the line became worked by steam, an iron roof covered the viaduct preventing sparks from locomotives igniting wooden ships in the dock below.

Limehouse Station Three Colt Street

This is the only surviving example of an original 1840 London & Blackwall Railway station. Although the platforms were removed after the station closed in 1926, much of the ground level building remains.

Dockmasters House, West India Dock Road

Built in 1807 by the West India Dock Company, the building has been used in turn as an excise office, a tavern and a dock office. It is now one of the main offices of the London Docklands Development Corporation, and lies on the south-west side of the railway bridge over the West India Dock Road.