

MINUTES FROM THE ENGINEERING COMMITTEE MEETINGS

by Tony Beard

MEETING NO.220 HELD ON 8 AUGUST 1938

Special Expenditure Requisitions Approved (Other than New Works Programme 1935/40)

The following special expenditure requisitions, having been approved and signed by the Officers concerned, were submitted for the approval and signature of the Vice-Chairman:

- (a) Provisional CB127 for the purchase of one 8-car compartment stock train, Metropolitan Line, in accordance with the next headed entry, at a total cost not exceeding £50,000, the work to be executed by the Chief Mechanical Engineer and to be completed in approximately nine months from the date of placing the order.

This was approved and would be charged as to £37,500 to Capital Account and as to £12,500 to Maintenance Reserve Account subject to confirmation of the Comptroller and Accountant that this procedure is in order from an accounting point of view.

- (b) F327 for the lengthening of sidings at Euston, Golders Green Depot and Morden Depots, and minor alterations at Clapham Common station and to the crossover at Morden Depot to permit 7-car trains of new stock being operated on the Northern Line at a total cost of £4,300, the work to be executed by the Chief Engineer and the Estate Agent and to be completed by 31 December 1938.

This was approved and would be charged as £3,530 to Capital Account and as £770 to Maintenance Reserve Account. A claim for an additional allowance from the Pool to be submitted in respect of the whole expenditure.

The Comptroller and Accountant was requested to report on the reason for this expenditure not being charged to the New Works Programme 1935/40.

Metropolitan Line: New Compartment Stock

An inspection was made of a model of the proposed new compartment stock with sliding doors and corridors between compartments alternately placed on each side of the cars.

Mr Graff-Baker reported that the approximate cost of building a new train of this type having two motorcars and six trailer cars was £50,000. It was decided:

- (a) That this design of rolling stock should be approved in principle subject to:
- (i) Additional seats being provided in the large compartments that occur at the end of some examples of the third class cars.
 - (ii) The first class compartments being of similar size to the third class but provided with arm rests and different moquette and the two large compartments at the end of some cars remaining as shown on the model without additional seats.
 - (iii) Simple lights being provided instead of recessed lights as shown on the model
 - (iv) Consideration being given to using the two shades of green for third class cars as shown on the model submitted and two shades of yellow for first class cars. A recommendation in respect of colours would be submitted to the Engineering Committee and the Chairman.

Drawings would be submitted for approval showing complete third and first class cars in accordance with the decisions set out above.

- (b) To authorise Mr Graff-Baker to negotiate with Metropolitan-Cammell Carriage and Wagon Co. for the purchase of one experimental train comprising two motor cars and six trailer cars of the design referred to above for a sum not exceeding £50,000 for which a provisional special expenditure requisition would be submitted.

Edgware Station: Reconstruction: Engineering Work: Report on Tenders

Mr Robertson submitted a memorandum dated 5 August reporting that tenders for the engineering work in connection with the reconstruction of Edgware Station had been received from the firms set out below and that the three lowest tenders had been examined and, subject to minor correction, were correct:

Fletcher & Co Ltd

Mitchell Bros. Sons & Co Ltd

A. Jackaman & Sons Ltd

John Mowlem & Co Ltd

Kinnear Moodie & Co.

Edmund Nuttall Sons & Co, (London) Ltd

In accordance with Mr Robertson's recommendation, it was decided that the lowest tender should be accepted, being that submitted by Fletcher & Co Ltd amounting to £57,375; the work is to be completed in 18 months.

Wellington Sidings; Retaining Wall: Extension to Contract

Mr Robertson submitted a memorandum dated 2 August reporting that in connection with the construction of the new depot at Wellington Sidings, it was necessary to build a retaining wall on the north side of the sidings and that estimate had been received from Messrs W & C French Ltd who were working on the site and from Messrs A Jackaman & Sons Ltd who were constructing the new bridges at East Finchley.

In accordance with Mr Robertson's recommendation it was decided to accept the estimate from W & C French amounting to £2,653 as an extension to their existing contract and that work should be immediately put in hand.

Metropolitan – Bakerloo Line Improvements Scheme; Progress Report

Mr Robertson submitted a report dated 2 August upon the progress of the Metropolitan – Bakerloo Line improvements scheme. Mr Robertson stated that the works referred to in the report were proceeding generally in accordance with the programme which provided for the opening of the Bakerloo Line service to Stanmore in June 1939. The report was reviewed and accepted subject to the following decisions:

(a) Extension of Uxbridge Line to High Street

The Station Committee would be required to agree the date at which the new station at Uxbridge should be brought into service having regard for the requirements of all departments.

(b) Date of Opening of Bakerloo Line Service to Stanmore

A scheme to be prepared for the opening of the Bakerloo Line service to Stanmore in June 1939 with a readjustment of the proposed initial services if the extensions of the platforms are not all completed, on the understanding that they would be completed by September 1939. No considerable sum of money is to be spent upon the swiftly undertaking the work to extend the platforms without specific authority.

Highgate (LNER) Station; Opening

Mr Holden reported that the upper flight of escalators at Highgate (LNER) Station might not be ready by the date of the opening of the new tube service from Archway (Highgate) to East Finchley. It was decided that a further report should be submitted in due course upon the progress of work in connection with Highgate (LNER) Station and that if it appeared likely that the upper station would not be completed by the opening of the tube service, a scheme should be prepared:

(a) For expediting the construction of the escalators.

(b) For maintaining the means of access to the station for passengers reaching the station from Archway Road from the north.

Bushey Heath Station

Mr Holden submitted a drawing showing the general layout of Bushey Heath station and the adjoining roads to accord with the latest requirements of the Road Authorities. It was noted that the Road Authorities now wished to carry the Watford By-Pass Road past the station on an embankment. It was decided that Mr Robertson must discuss with the Chief Engineers of the Road Authorities their proposals in relation to the layout of the Board's facilities and explain to them that the Board could not agree to a scheme that involved considerable additional expenditure by reason of any alteration in levels of the road.

Platform Gap Lights

Mr Evan Evans submitted a memorandum dated 4 August referring to the fact that lights were provided under platforms which were curved to show up the gaps between the cars and the platforms and that at some places these lights were switched on automatically by the train. He reported that the sudden illumination had directed more attention to the gaps and that there had been a reduction in the number of passengers slipping between the cars and the platforms. It was proposed to extend the automatic control of the lights to the seven platforms set out below:

Moorgate (Northern Line)	Northbound and Southbound
Elephant and Castle (Northern Line)	Northbound and Southbound
Holborn (Piccadilly Line)	Eastbound
Bank (Central Line)	Eastbound and Westbound

The estimated cost of this proposal was £350 with an annual saving in current of approximately £79 due to the lights not burning continuously. It was decided to approve the proposal as set out above and a special expenditure requisition would be submitted.

Consideration of Safety Factor on the Board's Railways; Installation of Lighting in District and Metropolitan Line Tunnels

A memorandum dated 5 August was submitted on behalf of the Technical and Safety Committee recommending that the scheme for installing lighting in the tunnels of the District and Metropolitan Lines should be as follows:

- A row of lamps to be installed on each side of the tunnel at a height of 8ft above rail level.
- The lamps in each row to be 30ft apart in the case of double track and 40ft apart in the case of single track tunnels.
- The lamps on opposite side of the tunnel to be staggered so that there are lamps at 15ft intervals in double track and at 20ft intervals in single track tunnels, successive lamps being on alternate sides.
- The current for the lamps to be supplied normally from outside sources but a changeover switch to be provided at stations so that in the event of the outside supply failing, the tunnel lighting may be switched over to the Board's supply.

The estimated cost of the complete installation in both single and double track tunnels including those on the East London Line was £32,512; the work would be completed by December 1939.

It was further reported in the memorandum that a short length of double track tunnel on the District Line west of Westminster Station had been equipped experimentally with lighting on the basis set out above and that it was considered satisfactory.

It was decided to approve the provision of lighting on the District and Metropolitan Line tunnels in accordance with the scheme set out above subject to authority being obtained from the East London railway Joint Committee for the installation of tunnel lighting on the East London Railway. A special expenditure requisition would be submitted.

Signalling Programme: Hammersmith & City Line

Mr Robertson submitted a memorandum dated 5 August referring to the fact that the Hammersmith & City Joint Committee had approved an expenditure of £15,200 upon the modernisation of signalling on the H&C Line during the period 1936/40 and that in preparing schemes for modernisation, it had been found that Latimer Road Junction could be operated by remote control from the existing Hammersmith signal cabin at an additional cost of £6,250 with a consequent saving in operating costs of £600 per annum.

Authority was sought to proceed with the proposal, subject to the agreement of the Great Western Railway. This was approved and the Vice-Chairman directed Mr Robertson to send him a draft letter for submission to the General Manager of the GWR seeking his approval to the proposal and to confirmation at the next meeting of the Hammersmith and City Joint Committee.

Air Raid Precautions: King's Cross Disused York Road Tunnel; Shelter for LNER

Mr Robertson submitted a memorandum dated 4 August reporting that the LNER had asked whether arrangements could be made for use of the disused tunnel under York Road for protection of their staff at King's Cross during air raids. This tunnel had been constructed to permit trains from the direction of Finsbury Park on the LNER to proceed towards Baker Street on the Metropolitan Line. A plan of the tunnel was submitted and it was decided that the Board would agree in principle to the proposal. Mr Buller was requested to determine the ownership of the tunnel with the Estate and Rating Surveyor of the LNER and that if he confirmed ownership by the Board, they should negotiate the sale of the tunnel to the LNER sealing one end of the tunnel nearest the Board's Line and indemnifying the Board against any damage which might arise through their occupation of the tunnel.

The decisions set out below were taken at a meeting at the Signalling School, South Kensington on 3 August 1938 which was attended by the Vice-Chairman, Messrs Every and Dell and are recorded here for convenience:

South Kensington Signalling School

The Signalling School was inspected. Mr Every reported that it was desired to install modern apparatus here and improve the accommodation. The total cost would be in the order of £1,000.

It was decided that a scheme should be prepared and submitted for modernising the School in the light of present day requirements. In this connection, consideration would be given to installing a complete model railway, the equipment which was used at the exhibition at Charing Cross some years ago being employed for the purpose.

MEETING No.221 HELD ON 15 AUGUST 1938

Withdrawal of Redundant Assets

Mr Robertson reported that Sir Robert McAlpine & Sons were not interested in the 25 5-ton ballast wagons, the disposal of which had been previously agreed. Mr Graff-Baker reported that no use could be found for the wagons and he therefore recommended that they should be scrapped. This recommendation was accepted and authority to withdraw redundant assets CB/120 covering the 25 ballast wagons was approved for submission to the Chairman's Meeting.

Harrow-on-the-Hill Station Reconstruction: Lifts for GPO Mails

A memorandum dated 15 August on behalf of the Operating Manager (Railways), reporting that it would not be possible to continue the present scheme by which mails were transferred across the tracks to Harrow-on-the Hill station on barrows and that a scheme had been prepared to extend the existing subway under the tracks to the post office and the installation of lifts at each platform together with another in the post office for the purpose of handling mails.

It was proposed that the Metropolitan & Great Central Joint Committee should instal, own and maintain the lifts and subway extension and that the General Post Office should be requested to pay that proportion of the cost of the facilities appropriate to their user which was estimated to amount to £613 per annum. Authority was sought to undertake the scheme on the basis set out in the memorandum and to order the necessary equipment.

It was decided to approve the scheme in principle, subject to the agreement of the Comptroller and Accountant and that if he confirms that the financial basis is in order, an endeavour should be made to reach quickly an agreement regarding the scheme with the GPO. A further report would be submitted as soon as possible so that a decision might be reached regarding the purchase of equipment.

North and North East London Electrification Schemes: Signalling

Mr Robertson submitted a memorandum dated 12 August referring to the fact that signalling proposals and estimates for the North and North East London Electrification Schemes had been approved by the Standing Joint Committee at their meeting held on 22 March 1937 and that specific reference was made in their discussions to the provision of power signal cabins at Leytonstone, Newbury Park, Loughton and Hainault.

He reported that further consideration of the signalling for the North East London electrification Scheme had shown that it was desirable to provide a power operated signal cabin at Woodford that could displace both the existing Woodford and Woodford Junction cabins. The extensive track alteration at Woodford would, in any case, necessitate the provision of a new cabin and the proposed combined cabin would result in a saving of operating staff.

He further reported that at the time when the signalling proposals and estimates were prepared, particulars for the North London Electrification Scheme were not available. It was now desired to provide power signal cabins at Park Junction, East Finchley, Finchley Central and High Barnet.

Mr Maxwell suggested that it would be desirable to carry out alterations to Grange Hill cabin so as to enable a full service of trains to be worked from the north end of Hainault Depot in the event of the south end being completely blocked. It was decided:

- (a) To approve the proposal to provide power-operated cabins at Woodford, Park Junction, East Finchley and High Barnet to be submitted for agreement to the LNER.
- (b) That, subject to the agreement of the LNER, these signalling proposals not exceeding the estimates approved by the Joint Standing Committee, the work should proceed without further authority.

However, in the event of the proposals exceeding the estimates, a memorandum should be prepared for subsequent submission to the Standing Joint Committee seeking its approval to the additional expenditure.

Northern Line: Relief Points for Drivers

Mr Robertson reported that it would be necessary to obtain parliamentary powers for the enlargement of tunnels at Camden Town, Euston and Kennington stations to provide additional lengths of platforms to enable drivers of nine-car trains to be relieved.

It was decided to seek powers for the enlargement of the aforementioned tunnels for inclusion in the 1938/39 Bill.

Extension of the Board's Trains West of Ealing Broadway

A memorandum dated 15 August was submitted on behalf of the Operating Manager (Railways), reporting the Great Western Railway Company had approached the Board with a view to preparing a scheme for projecting the Board's trains from Ealing Broadway to West Ealing station. The preliminary scheme which was shown on the plan submitted provided for the reconstruction of the station at Ealing Broadway used by the Board's trains to provide two island platforms connected together at their western end with two bay roads in the centre and for the construction of a new station at West Ealing with sidings and a shunting neck for stabling cars. It was proposed in the first place that Central Line trains should be reversed at Ealing Broadway in the two centre bay roads; the District Line trains would continue to West Ealing. East of Ealing Broadway, flying junctions would be provided so that either District or Central Line trains could be reversed at Ealing Broadway or projected beyond it.

A decision was required regarding provision being made in the new signal cabin to be constructed at Ealing Broadway for the possible extension of trains west of the station. It was decided:

- (a) That Mr Maxwell should consider and report upon:
 - (i) The case for extending the Board's trains from Ealing Broadway to West Ealing or beyond.
 - (ii) Consideration regarding the possibility of reaching a satisfactory terminal in the neighbourhood of Hanwell or Southall.
 - (iii) The possibility of extending electric trains over the Castlebar loop if the traffic is likely to develop, or alternatively, the replacement of services on the loop by buses.
- (b) That in rebuilding the signal cabin at Ealing Broadway, provision is made for the extension westwards of the District and/or Central Line services.
- (c) That Mr Robertson should submit estimates for the works east of Ealing Broadway providing separately those works required for the projection westwards of the District Line service only and those necessary for the projection of the District and/or Central Line services.

Liverpool Street Station Reconstruction

It is here recorded for convenience that the Vice-Chairman accompanied by Messrs V.A.M. Robertson, S.A. Heaps and F.G. Maxwell visited Liverpool Street station on Friday 12 August and considered the scheme shown on submitted drawings for the proposed new joint station for the Central and Metropolitan lines. Also considered was a scheme for a passageway between the Board's existing ticket hall in Broad Street and the new ticket hall. It was decided:

- (a) To approve the scheme for a joint station for the Central and Metropolitan lines shown on the submitted lines, subject to:
 - (i) The improvement of the main entrance in Liverpool Street by extending the treatment of the front of the station to cover the shops on either side.
 - (ii) The stairs leading from the main entrance direct to the Central Line ticket hall being increased in width to 12ft.
- (b) To approve the scheme for a direct passageway between the Board's existing ticket hall and Broad Street and the top of the new escalators to the Central Line, subject to:
 - (i) The alignment of the passageway being altered as indicated on the drawing.
 - (ii) The existing entrances to the ticket hall of the Board's Broad Street station being improved as indicated, consideration being given in particular to reversing the direction of the westerly entrance in order to lead more conveniently into the passage.
- (c) That there is no justification for a subway under Old Broad Street connecting to the new ticket hall.

- (d) That Mr Robertson ascertain from the London, Midland & Scottish Railway if they would be prepared to close the east exit from their Broad Street station in the block between the forecourt and Liverpool Street in order for the space to be used as an information kiosk
- (e) That the Commercial Manager should give consideration to the provision of tickets of a special colour to stations on the Shenfield electrified line to be sold at the Board's ticket office in order to assist in the direction of passengers to the proper platforms.

MEETING No.222 HELD ON 29 AUGUST 1938

Withdrawal of Redundant Assets; Seeburger Escalators

Mr Graff-Baker submitted withdrawal of redundant assets CB 128 covering two Seeburger Escalators which had been withdrawn by reason of their replacement by MA type escalators as authorised by special expenditure requisition G204. This was approved for submission to the Chairman's Meeting.

Kingsbury Station: Passimeter Scheme

A memorandum dated 23 August was submitted on behalf of the Operating Manager (Railways) reporting that since the preparation of the original estimate of £469 for alterations at Kingsbury station, including the installation of a passimeter, an increase in prices amounting to £40 had been incurred which brought the total cost to £509. This was noted, as a special expenditure requisition would be submitted for the new amount.

Harrow-on-the-Hill Station Reconstruction

Further to earlier discussion, Mr Graff Baker reported that it would be necessary to order the lifts required for mail and parcel traffic at Harrow-on-the-Hill Station immediately if they were to be in operation on the date required. It was decided:

- (a) That the heads of departments concerned should swiftly supply the Secretary and Chief Legal Adviser all facts in order for him to conduct negotiations with the GPO.
- (b) To authorise immediately the purchase of the lifts necessary for railway purposes.

Marylebone Station (Bakerloo Line): Escalator Scheme

A memorandum dated 27 August was submitted on behalf of the Chief Engineer reporting that the London & North Eastern Railway had accepted that the Board would only pay for the provision of lavatory accommodation equivalent to that now existing which would be disturbed by the Board's works at Marylebone station (Bakerloo Line). There were no outstanding points with the LNER and authority was therefore requested to proceed with the reconstruction of the station.

It was decided to permit authority for the commencement of the reconstruction of Marylebone station (Bakerloo Line) in advance of the approval of the special expenditure requisition.

Northern City Line: Proposed Extension Southwards

Attention was drawn to earlier discussion during which it was decided to reconsider in August 1938 the proposal to extend the Northern City Line southwards to a new interchange station on the District Line that would replace Mansion House and Cannon Street. Mr J H.H. Mason reported that consideration is still being given to the amalgamation of Mansion House and Cannon Street Stations. It was decided:

- (a) That the question of extending the Northern City Line southwards to the District Line would be reconsidered in July 1939.
- (b) That meanwhile further study should be given to the proposed amalgamation of Mansion House and Cannon Street Stations and a scheme for this purpose submitted.

Leicester Square: Proposed Concrete Roof over Emergency Control Office Lift Shaft

A memorandum dated 26 August was submitted on behalf of the Chief Engineer requesting authority to immediately commence the construction of the proposed concrete roof over the emergency control office in the lift shaft at Leicester Square at an estimated cost of £1,500. This was approved and would be charged to Air Raid Precautions