

# THE UNDERGROUND AND THE OLYMPICS – 2012

## INTRODUCTION

For timetabling purposes, the network was divided into Category 'A' lines (those that directly served the Olympic Park) and Category 'B' lines (those that did not). The Central, Jubilee, District, Hammersmith & City (and Circle) were Category 'A'. The rest fell into Category 'B'.

For the 17 days of the Olympics and 12 days for the Paralympics, the entire network (except for Heathrow T4 and Kensington Olympia stations, and the Hainault – Woodford service) operated extended traffic hours. This was based around two 'rules':

- Last trains towards central London departing Stratford/West Ham at 01.30.
- No stabling of trains later than 02.30.

This effectively led to a complete revision of last trains across the network with lines generally operating services about one hour later than normal, a little more on some lines, but with some last trains unable to operate to the end of the line, because of the 02.30 'rule'.

There were also very few last train connections in the central area – the intention was that very last trains from Stratford/West Ham provided a facility *into* central London rather than *through* it.

These last train times applied each day of the week, including Sundays. However, the only exception was that on the Opening Ceremony night, services ran for a further hour later than the Olympic last trains, e.g. 02.30 ex Stratford/West Ham with stabling no later than 03.30.



**Left:** As will be seen from the photographs in the centre pages of this issue, there was a plethora of temporary white-on-magenta signage at many stations for the Olympics. Another of these is seen above the District Railway station name sign on platform 9 at Ealing Broadway, highlighting the way to (First Great Western) trains for the Eton Dorney rowing and canoe events (which were at Windsor – there is no station, of course, at Eton Dorney, which is what the sign implies!).

**Photo: Colin Smith**

Start of Traffic was as normal with the exception of Sundays, when lines started generally between 30 and 45 minutes earlier, with Cat 'A' lines having first eastbound trains reaching Stratford/West Ham by 07.00 and passengers from Cat 'B' lines being able to change onto Cat 'A' services and arrive at Stratford by 07.30.

As for Cat 'B' lines, that is about it in terms of service changes (apart from the Metropolitan which had various modifications for the Olympic football events at Wembley Stadium). For Cat 'A' lines, changes were a little more extensive.

The Central and Jubilee lines operated modified service frequencies and patterns to match demand to/from the Olympic Park (plus Excel and the Dome for the Jubilee). This gave rise to a third peak late at night (approx. 22.00 – 23.30) with increased services operating on both lines, albeit on a limited number of occasions.

On the District Line, the changes were limited to the introduction of a revised off-peak service pattern which eliminated Tower Hill reversing and extending those trains alternately to Plaistow and Dagenham East. Together with the 6tph H&C, this provided 24tph through West Ham.

One further change to the specification (decided much later on in the planning process) was that the Waterloo & City Line would operate extended traffic hours over the period, with last trains on all days matching the later finish of the rest of the network, and the provision of a Sunday service, starting at Saturday times and including the later finish.

Planned changes to station access (adjusted as necessary at the time) may be summarised as follows:

- Marble Arch – Exit only 10.00 – 22.00 daily from 27 July to 12 August.
- Hyde Park Corner – Exit only 10.00 – 22.00 daily 27 July to 12 August.
- Earl's Court – One-way passenger traffic flow. Entry via Warwick Road and exit via Earl's Court Road daily 27 July – 12 August.
- Canary Wharf – One-way passenger traffic flow from 16.00 Monday to Fridays. Station entry via the Plaza (west) entrance and exit via the east end.

For the purpose of these notes, only the details of the differences to normal service will be noted, to conserve on space. That will include the extended service period at night and the earlier start on Sundays. Where the main body of timetables are unchanged during the day with the timetables currently in use, these too will not be covered.

## TIMETABLES IN OPERATION

TTN	Line	'Volumes'	Dates
1/12	Metropolitan	Vol. A	Friday to Sunday 27-29 July, Saturdays/Sundays 4/5 & 11/12 August.
1/12	Metropolitan	Vol. B	Monday to Friday 30 July to 10 August.
101/12	Metropolitan	One TTN	29 August to 9 September.
2/12	C'cle/H'smith	Vol. A	Friday/Saturday 27/28 July.
2/12	C'cle/H'smith	Vol. B	29 July to 12 August, 29 August to 9 September.
3/12	District	Vol. A	Friday/Saturday 27/28 July.
3/12	District	Vol. B	29 July to 12 August, 29 August to 9 September.
4/12	Jubilee	Vol A	Friday to Sunday 27-29 July, Saturdays/Sundays 4/5 & 11/12 August.
4/12	Jubilee	Vol B	30 July to 10 August.
93/12	Jubilee	One TTN	29 August to 9 September.
5/12	Northern	Vol A	Friday/Saturday 27/28 July.
5/12	Northern	Vol B	29 July to 12 August, 29 August to 9 September.
6/12	Piccadilly	Vol A	Friday/Saturday 27/28 July.
6/12	Piccadilly	Vol B	29 July to 12 August, 29 August to 9 September.
7/12	Bakerloo	One TTN	27 July to 12 August, 29 August to 9 September.
8/12	Central	Vol A	Friday to Sunday 27-29 July, Saturdays/Sundays 4/5 & 11/12 August.
8/12	Central	Vol B	Monday to Friday 30 July to 10 August.
92/12	Central	One TTN	29 August to 9 September.
9/12	Victoria	One TTN	27 July to 12 August, 29 August to 9 September.
80/12	W'loo & City	One TTN	27 July to 12 August, 29 August to 9 September.

## LAST TRAINS AND SUNDAY FIRST TRAINS

Whilst it would be fair to say that services were extended to operate "by about an hour" (two hours on the night of the opening ceremony), there were some notable exceptions by the constraints of having trains stabled by 02.30 and 03.30 respectively. These noted below will mostly include services 'through the road' and will omit late night short journeys for stabling purposes, e.g. Epping – Loughton, Stanmore – Wembley Park, etc. First trains on Sundays were variable too, with some services being at similar times, others up to half an hour earlier, and some around an hour earlier, as will be seen.

### BAKERLOO LINE

1 HOUR LATER	2 HOURS LATER	NORMAL LAST	
01.13	02.13	00.13	Elephant & Castle – Harrow & Wealdstone
01.19	02.19	00.13	Elephant & Castle – Stonebridge Park
01.48	02.48	00.23	Elephant & Castle – Queen's Park
01.21	02.21	23.54	Harrow & Wealdstone – Elephant & Castle

**SUNDAY START**

**OLYMPIC**    *NORMAL*  
**FIRST**      *FIRST*

<b>06.45</b>	<i>07.13</i>	Queen's Park – Harrow & Wealdstone
<b>06.48</b>	<i>07.16</i>	Elephant & Castle – Harrow & Wealdstone
<b>06.44</b>	<i>07.14</i>	Queen's Park – Elephant & Castle
<b>06.53</b>	<i>07.23</i>	Harrow & Wealdstone – Elephant & Castle

**CENTRAL LINE**

**1 HOUR**      **2 HOURS**    *NORMAL*  
**LATER**      **LATER**          *LAST*

<b>00.50</b>	<b>01.53</b>	<i>23.45</i>	Epping – West Ruislip
<b>00.58</b>	<b>01.58</b>	–	Epping – Ealing Broadway
<b>02.09</b>	<b>01.09</b>	<i>23.48</i>	Hainault – White City ( <i>normally Hainault – Ealing Broadway</i> )
<b>00.56</b>	<b>01.56</b>	<i>23.56</i>	Ealing Broadway – Hainault
<b>01.06</b>	<b>02.06</b>	<i>00.10</i>	North Acton – Epping
<b>00.53</b>	<b>01.53</b>	<i>23.53</i>	West Ruislip – Hainault ( <i>normally West Ruislip – Epping</i> )

**SUNDAY START**

**OLYMPIC**    *NORMAL*  
**FIRST**      *FIRST*

<b>06.22</b>	<i>06.57</i>	Hainault – Ealing Broadway
<b>06.30</b>	–	Loughton – West Ruislip
<b>06.36</b>	<i>06.42</i>	Epping – West Ruislip
<b>06.10</b>	<i>06.55</i>	White City – Epping ( <i>normally White City – Hainault</i> )
<b>06.07</b>	<i>07.03</i>	Ealing Broadway – Hainault
<b>06.02</b>	<i>06.41</i>	West Ruislip – Epping

**CIRCLE & HAMMERSMITH LINES**

**1 HOUR**      **2 HOURS**    *NORMAL*  
**LATER**      **LATER**          *LAST*

<b>00.31</b>	<b>01.31</b>	<i>23.31</i>	Hammersmith – outer rail Circle – Edgware Road
<b>01.14</b>	<b>02.14</b>	<i>00.11</i>	Hammersmith – Barking
<b>01.29</b>	<b>02.29</b>	<i>00.29</i>	Hammersmith – Edgware Road
<b>01.43 †</b>	<b>02.43 †</b>	<i>00.42 †</i>	Edgware Road – King's Cross
<b>01.14</b>	<b>02.14</b>	–	Barking – Hammersmith ( <i>normally 23.53 Barking – Edgware Road and 00.16 Plaistow – Hammersmith</i> )
<b>01.00</b>	<b>02.00</b>	<i>24.00</i>	Edgware Road – inner rail Circle – Hammersmith
<b>01.40</b>	<b>02.40</b>	<i>00.40</i>	Aldgate – Hammersmith ( <i>normally to Edgware Road</i> )

† Formed by 00.31 / 01.31 / 23.31 Hammersmith – outer rail Circle – Edgware Road. See above.

**SUNDAY START**

**OLYMPIC**    *NORMAL*  
**FIRST**      *FIRST*

<b>06.16</b>	<i>06.56</i>	Hammersmith – Barking
<b>06.22</b>	<i>06.21</i>	Hammersmith – outer rail Circle – Edgware Road
<b>06.31</b>	<i>06.41</i>	Barking – Hammersmith
<b>07.07</b>	<i>07.07</i>	Edgware Road – inner rail Circle – Hammersmith

**DISTRICT LINE**

**1 HOUR**      **2 HOURS**    *NORMAL*  
**LATER**      **LATER**          *LAST*

<b>00.48</b>	<b>01.48</b>	–	Plaistow – Wimbledon ( <i>normally 00.17 Tower Hill – Wimbledon</i> )
<b>00.22</b>	<b>01.22</b>	<i>23.41</i>	Upminster – Ealing Broadway
<b>00.49</b>	<b>01.49</b>	–	Upminster – Putney Bridge
<b>01.01</b>	<b>02.01</b>	<i>23.36</i>	Upminster – Richmond
<b>01.01</b>	<b>02.01</b>	<i>24.00</i>	Barking – Ealing Broadway
<b>01.30</b>	<b>02.30</b>	<i>00.20</i>	Edgware Road – Wimbledon
<b>00.42</b>	<b>01.42</b>	–	Wimbledon – Upminster ( <i>normally 00.51 Wimbledon – High Street</i> )
<b>00.43</b>	<b>01.42</b>	<i>23.41</i>	Ealing Broadway – Upminster

<b>1 HOUR LATER</b>	<b>2 HOURS LATER</b>	<i>NORMAL LAST</i>	
<b>00.50</b>	<b>01.50</b>	<i>00.03</i>	Richmond – Upminster
<b>01.21</b>	<b>02.21</b>	<i>23.38</i>	Wimbledon – Edgware Road
<b>01.32</b>	<b>02.32</b>	<i>00.51</i>	Wimbledon – High Street Kensington

**SUNDAY START**

<b>OLYMPIC FIRST</b>	<i>NORMAL FIRST</i>	
<b>05.37</b>	<i>05.37</i>	Upminster – Aldgate East
<b>06.08</b>	<i>06.10</i>	Upminster – Richmond
<b>06.39</b>	<i>06.39</i>	Earl's Court – Ealing Broadway
<b>07.07</b>	<i>07.07</i>	Earl's Court – Wimbledon
<b>07.15</b>	<i>07.15</i>	Edgware Road – Wimbledon
<b>06.03</b>	<i>06.13</i>	Ealing Common – Upminster ( <i>normally Acton Town – Upminster</i> )
<b>06.18</b>	<i>06.18</i>	Ealing Broadway – Upminster
<b>06.30</b>	<i>07.00</i>	Wimbledon – High Street Kensington
<b>07.08</b>	<i>07.08</i>	Wimbledon – Edgware Road
<b>06.25</b>	<i>07.22</i>	Richmond – Upminster

**JUBILEE LINE**

<b>1 HOUR LATER</b>	<b>2 HOURS LATER</b>	<i>NORMAL LAST</i>	
<b>01.22</b>	<b>02.22</b>	<i>00.11</i>	Stratford – Stanmore
<b>01.30</b>	<b>02.30</b>	<i>00.11</i>	Stratford – Wembley Park
<b>01.14</b>	<b>02.14</b>	<i>00.13</i>	Stanmore – Stratford

**SUNDAY START**

<b>OLYMPIC FIRST</b>	<i>NORMAL FIRST</i>	
<b>06.36 ‡</b>	<i>06.55</i>	Stratford – Stanmore ‡
<b>06.17</b>	<i>07.08</i>	Neasden – Stratford
<b>06.33</b>	<i>07.06</i>	Wembley Park – Stratford
<b>06.30</b>	<i>06.55</i>	Stanmore – Stratford

‡ For the Sunday Olympic start-up, a number of trains ran empty from Stratford Market depot to take up passenger working further along the line, first trains being:

- 06.34 Green Park – West Hampstead
- 06.38 Green Park – Stanmore
- 06.40 Waterloo – West Hampstead
- 06.42 London Bridge – Stanmore

**METROPOLITAN LINE**

(All trains, all stations)

<b>1 HOUR LATER</b>	<b>2 HOURS LATER</b>	<i>NORMAL LAST</i>	
<b>00.37</b>	<b>01.37</b>	<i>00.02</i>	Aldgate – Chesham
<b>00.52</b>	<b>01.52</b>	<i>23.47</i>	Aldgate – Amersham
<b>01.07</b>	<b>02.07</b>	<i>00.02</i>	Aldgate – Rickmansworth
<b>01.12</b>	<b>02.12</b>	<i>00.12</i>	Aldgate – Uxbridge ( <i>normally 00.43 Baker Street – Uxbridge</i> )
<b>01.39</b>	<b>02.39</b>	<i>00.11</i>	Baker Street – Watford
<b>01.59</b>	<b>02.59</b>	<i>00.48</i>	Baker Street – Wembley Park
<b>00.02</b>	<b>01.02</b>	<i>00.02</i>	Uxbridge – Aldgate ( <i>normally Uxbridge – Baker Street</i> )
<b>00.23 †</b>	<b>01.28 *</b>	<i>23.55 †</i>	Chesham – Wembley Park† and Chesham – Harrow*
<b>00.38</b>	<b>01.37</b>	<i>23.47</i>	Amersham – Baker Street
<b>00.58 ‡</b>	<b>02.08 §</b>	<i>00.38 #</i>	Watford – Harrow‡, Watford – Baker Street§ and Watford – Wembley Park#
<b>00.53</b>	<b>00.55</b>	<i>23.25</i>	Chesham – Baker Street
<b>01.00</b>	<b>02.00</b>	<i>00.35</i>	Uxbridge – Wembley Park

**SUNDAY START**

<b>OLYMPIC</b>	<i>NORMAL</i>
<b>FIRST</b>	<i>FIRST</i>

<b>06.05</b>	<i>06.35</i>	Uxbridge – Baker Street ( <i>normally Uxbridge – Aldgate</i> )
<b>06.15</b>	<i>06.45</i>	Rickmansworth – Baker Street ( <i>normally Rickmansworth – Aldgate</i> )
<b>06.23</b>	<i>07.02</i>	Watford – Baker Street
<b>06.32</b>	<i>07.02</i>	Amersham – Aldgate
<b>06.55</b>	<i>07.55</i>	Chesham – Aldgate

Northbound first trains were in the main unchanged.

**NORTHERN LINE**

<b>1 HOUR</b>	<b>2 HOURS</b>	<i>NORMAL</i>
<b>LATER</b>	<b>LATER</b>	<i>LAST</i>

<b>01.26</b>	<b>02.26</b>	<i>00.32</i>	Kennington – Edgware (CX)
<b>01.32</b>	<b>02.32</b>	–	Kennington – High Barnet (CX)
<b>01.46</b>	<b>02.46</b>	<i>00.32</i>	Kennington – Golders Green (CX)
<b>00.51</b>	<b>01.51</b>	<i>00.01</i>	Morden – High Barnet (City)
<b>00.57</b>	<b>01.57</b>	–	Morden – Mill Hill East (City) ( <i>Normally 01.02 ex-Finchley Central</i> )
<b>01.08</b>	<b>02.08</b>	<i>23.48</i>	Morden – Edgware (City)
<b>01.15</b>	<b>02.15</b>	–	Morden – East Finchley (City) †
<b>01.22</b>	<b>02.22</b>	–	Morden – Hampstead (City) †
<b>01.11</b>	<b>02.11</b>	<i>23.59</i>	Edgware – Morden (CX)
<b>01.10</b>	<b>02.10</b>	<i>23.57</i>	High Barnet – Morden (City)
<b>01.09</b>	<b>02.09</b>	–	Mill Hill East – Morden (City) ( <i>Normally 00.53 Mill Hill East – Finchley Central</i> )

† These two locations are unusual for trains to terminate, highlighting the need for trains to be in depot by 02.30 and 03.30.

**SUNDAY START**

<b>OLYMPIC</b>	<i>NORMAL</i>
<b>FIRST</b>	<i>FIRST</i>

<b>06.26</b>	<i>06.59</i>	Morden – Edgware (City) ( <i>Normally via CX</i> )
<b>06.30</b>	<i>06.56</i>	Morden – High Barnet (CX) ( <i>Normally via City</i> )
<b>06.21</b>	<i>06.51</i>	Mill Hill East – Finchley Central
<b>06.22</b>	<i>06.52</i>	High Barnet – Morden (City) ( <i>Normally via CX</i> )
<b>06.24</b>	<i>06.54</i>	Edgware – Morden (CX) ( <i>Normally via City</i> )

**PICCADILLY LINE**

It should be noted that services to and from Heathrow T4 finished at normal times.

<b>1 HOUR</b>	<b>2 HOURS</b>	<i>NORMAL</i>
<b>LATER</b>	<b>LATER</b>	<i>LAST</i>

<b>00.34</b>	<b>01.34</b>	<i>23.54</i>	Arnos Grove – Heathrow T5 ( <i>normally 23.43 ex-Cockfosters</i> )
<b>00.39</b>	<b>01.39</b>	<i>23.55</i>	Cockfosters – Heathrow T123
<b>01.14</b>	<b>02.14</b>	<i>23.55</i>	Cockfosters – Northfields
<b>01.56</b>	<b>02.56</b>	<i>00.58</i>	Acton Town – Uxbridge
<b>00.52</b>	<b>01.52</b>	<i>00.52</i>	Rayners Lane – Acton Town
<b>00.49</b>	<b>01.49</b>	<i>23.42</i>	Heathrow T5 – Cockfosters
<b>00.59</b>	<b>01.59</b>	<i>23.42</i>	Heathrow T5 – Arnos Grove
<b>01.04</b>	<b>02.04</b>	<i>24.00</i>	Heathrow T5 – Hammersmith
<b>01.15</b>	<b>02.15</b>	<i>00.18</i>	Heathrow T5 – Acton Town

**SUNDAY START**

No change to early-morning services to and from Heathrow at the west end of the line.

<b>OLYMPIC</b>	<i>NORMAL</i>
<b>FIRST</b>	<i>FIRST</i>

<b>06.39</b>	<i>06.56</i>	Acton Town – Rayners Lane
<b>06.28</b>	<i>07.06</i>	Cockfosters – Heathrow T4 ( <i>Normally 06.57 King's Cross – Heathrow T4</i> )
<b>06.43</b>	<i>06.51</i>	Cockfosters – Heathrow T5
<b>05.46</b>	<i>05.46</i>	Heathrow T4 – Cockfosters ( <i>Normally Heathrow T4 to King's Cross</i> ) †

**OLYMPIC**    *NORMAL*  
**FIRST**     *FIRST*

<b>06.07</b>	<i>06.07</i>	Heathrow T5 – Cockfosters ( <i>Normally Heathrow T5 to King's Cross</i> ) †
<b>06.28</b>	<i>06.49</i>	South Harrow – Acton Town
<b>06.54</b>	<i>07.04</i>	Rayners Lane – Acton Town

† First train 'through the road' normally 06.20 Heathrow T4 to Cockfosters.

**VICTORIA LINE**

**1 HOUR**    **2 HOURS**    *NORMAL*  
**LATER**     **LATER**        *LAST*

<b>01.48</b>	<b>02.48</b>	<i>00.27</i>	Brixton – Walthamstow
<b>01.31</b>	<b>02.31</b>	<i>00.09</i>	Walthamstow – Brixton
<b>02.01</b>	<b>03.01</b>	<i>00.53</i>	Walthamstow – Seven Sisters

**SUNDAY START**

**OLYMPIC**    *NORMAL*  
**FIRST**     *FIRST*

<b>06.44</b>	<i>06.59</i>	Walthamstow – Brixton
<b>06.51</b>	<i>06.51</i>	Brixton – Walthamstow

**WATERLOO & CITY LINE**

Quite simply, on all Olympic and Paralympic days, the Waterloo & City Line finished service at 01.00 ex-Waterloo and 01.07 ex-Bank (02.00 and 02.07 on the opening ceremony).

Sunday services began as on Saturdays, 08.00 Waterloo to Bank and 08.02 Bank to Waterloo.

**EXTENDED HOURS TRAIN SERVICES**

We will now have a look at the four lines which directly serve the Olympic area. Two of these are complex, as there are several different schedules throughout the period.

**CENTRAL LINE**

With Stratford being the focal point on the Central Line for the Games it goes without saying that the maximum service is provided through the area, sometimes at the expense of slightly reduced services at the western end of the line.

For the opening ceremony on <b>Friday 27 July</b> , a near normal service was provided during the day, with services after midnight being as follows (* no service Hainault – Woodford after normal closing times on any day):	West Ruislip	10	)	
	Ealing Broadway	10	)	
	North Acton – Leytonstone	5	)	34 trains
	Hainault	10	)	
	Epping	10	)	

For the main part of the day on **Saturday 28 July**, services were as follows, with 62 trains in service, reduced to 61 after the Hainault – Woodford service ends:

West Ruislip	10	Hainault	5-10
Ealing Broadway	10	Woodford via Hainault *	* 20
North Acton – White City	2½-5	Loughton	5
White City – Leytonstone	2½	Epping	10
Newbury Park	5		

**Sundays 29 July, 2 and 9 September:**

	07.30 to 10.00	10.00 to 16.00	After 16.00
West Ruislip	10	8-12	10
Ealing Broadway	10	8-12	5½-8½
North Acton – White City	5	4-8	2½-5½
White City – Leytonstone	5	4	2½-3
Newbury Park	10	8-12	3-7
Hainault	10	8-12	3½-10
Woodford via Hainault *	* 20	* 20	* 20
Loughton	10	4-8	5½-8½
Epping	10	8-12	8-12
<b>Total trains:</b>	<b>37</b>	<b>42</b>	<b>55</b>

On **Mondays to Fridays 30 July to 2 August**, a near normal service was provided during the day, with late-evening intervals as scheduled on 27 July with 36 trains in service.

Over the six days **Mondays to Fridays 3-10 August**, a near normal peak service was provided, although in the morning, the 30tph westbound service was slightly reduced to 2-2½ minute intervals, so that a slightly increased service could be provided on the eastbound, feeding traffic from central London to Stratford. Between the peaks a reduced service operated on the western branches with two separate service patterns – 21tph (55 trains) through the central area until 14.00 and then 24tph (62 trains) from then until the start of the evening peak. After the evening off-peak, a third 'peak' was scheduled from 22.00 with 74 trains in service. To enable 2-4 minute turn-rounds at White City in the middle platform, stepping back of Train Operators was scheduled from 21.54 to 23.27. The differing service intervals were as follows:

	11.00 to 14.00	14.00 to 17.00	After 22.00
West Ruislip	10	10	10
Ealing Broadway	5-9	10	4-10
North Acton – White City	2½-5½	2½-5	2-4
White City – Leytonstone	2½-3	2½	2
Newbury Park	2½-7½	5	2-6
Hainault	4-8	5-10	2-10
Woodford via Hainault *	* 20	* 20	* 20
Loughton	5½-8½	5	2-6
Epping	10	10	4-11
<b>Total trains:</b>	<b>55</b>	<b>62</b>	<b>74</b>

The 2-minute service interval through the central area applied 22.04 to 00.10 Liverpool Street westbound and 22.22 to 00.06 Leytonstone eastbound. This is the first time that 2-minute intervals on the Central Line have been scheduled in the eastbound direction for many years and certainly not with the new (1990s!) signalling system.

**Saturdays 4 and 11 August** were as follows with 62 trains in service until 21.45 and 74 trains thereafter:

	07.00 to 21.45	After 21.45		07.00 to 21.45	After 21.45
West Ruislip	10	10	Hainault	5-10	4-11
Ealing Broadway	10	4-10	Woodford via Hainault *	* 20	* 20
North Acton – White City	2½-5	2-4	Loughton	5	2-6
White City – Leytonstone	2½	2	Epping	10	3½-10
Newbury Park	5	2-7			

Services on **Sundays 5 and 12 August** were:

	07.30 to 10.00	10.00 to 16.00	16.00 to 22.00	After 22.00
West Ruislip	10	8-12	10	10
Ealing Broadway	10	8-12	5½-8½	10
North Acton – White City	5	4-6	2½-5½	2½-5
White City – Leytonstone	5	4	2½-3	2½
Newbury Park	10	8-12	2½-7	2½-6½
Hainault	10	8-12	3½-10	5½-8½
Woodford via Hainault *	* 20	* 20	* 20	* 20
Loughton	10	8-12	5½-8½	5½-8½
Epping	10	8-12	8-12	8-12
<b>Total trains:</b>	<b>37</b>	<b>42</b>	<b>55</b>	<b>61</b>

Turning now to the Paralympic Games, the services **Monday to Friday 29 August to 7 September** are as noted below. With the morning peak period, the 30tph westbound service was slightly reduced to 2-2½ minute intervals, so that a slightly increased service could be provided on the eastbound, feeding traffic from central London to Stratford.

As with all the services on other days, the Hainault – Woodford section closed at normal weekday times.

	11.00 to 14.00	14.00 to 17.00	After 19.00
West Ruislip	10	10	10
Ealing Broadway	5-9	10	5½-8½
North Acton – White City	2½-5½	2½-5	2½-5½
White City – Leytonstone	2½-3	2½	2½-3
Newbury Park	2½-7½	5	2½-5½
Hainault	4-8	5-10	3½-10
Woodford via Hainault *	* 20	* 20	* 20
Loughton	5½-8½	5	5½-8
Epping	10	10	10
<b>Total trains:</b>	<b>55</b>	<b>62</b>	<b>55</b>

### Saturdays 1/8 September:

	08.00 to 21.00	After 21.00		08.00 to 21.00	After 21.00
West Ruislip	10	10	Hainault	5-10	3½-10
Ealing Broadway	10	5½-8½	Woodford via Hainault *	* 20	* 20
North Acton – White City	2½-5	2½-5½	Loughton	5	5½-8½
White City – Leytonstone	2½	2½-3	Epping	10	8-12
Newbury Park	5	3-7			

62 trains in service until 21.00, then 56.

In all of these special timetables, because of the extended hours of operation of the Waterloo & City Line, to convey train crews back to their home depot at Leytonstone, an empty eastbound train worked 'through the road', stopping at Bank to pick up train staff, depart 02.04 (03.04 Friday night 27 July).

## JUBILEE LINE

### Friday 27 July

The midday off-peak service was enhanced to 24tph between Stratford and Willesden Green. With 4tph reversing at Willesden Green and 4tph reversing at Wembley Park, Stanmore was served by 16tph. A total of 49 trains were required for service.

The evening peak service (59 trains) was then extended to operate until 20.00, after which the 2½-minute service (of 50 trains) resumed to and from Stratford until 01.00, after which the service was every 2½-5 minutes until the close of traffic, with the last train departing Stratford for Wembley Park at 02.30. In the opposite direction, the last train scheduled to arrive at Stratford was at 03.10.

Stepping back of Train Operators at Stratford took place from 07.10 to 02.30 continuously.

### Saturday 28 July

An enhanced service was provided throughout the day with 24tph between Willesden Green and North Greenwich. With a North Greenwich reverser every 20 minutes, Stratford was served by 21tph until 00.30, after which intervals widened to 3½-5 minutes until the last departure at 01.30 with the last arrival at 02.10. These last train times thereafter applied to each evening covered by the special timetable notices. Trains in service varied between 49 and 51, according to the reversing of services at Willesden Green and/or Wembley Park. There was no stepping back of Train Operators at Stratford.

### Sunday 29 July

With a service start-up of up to an hour earlier than on a normal Sunday, the main service Willesden Green – North Greenwich was 24tph from 08.00 to 23.30, reducing slightly thereafter. The number of reversers at North Greenwich varied from 3tph (08.26 to 09.26 and 11.46 to 18.46) to 6tph (09.26 to 11.46 and 18.46 to 23.26). At the north end of the line there were Wembley Park reversers every 10 minutes from 08.48 to 16.58 and then Willesden Green reversers every 10 minutes from 17.04 to 23.55 and 00.08. In consequence of the differing patterns, the number of trains in service varied between 48 and 51. Again, there was no stepping back of Train Operators at Stratford.

### Mondays to Fridays 30 July to 2 August

The midday off-peak service was enhanced to 24tph between Stratford and Willesden Green. With 4tph reversing at Willesden Green and 4tph reversing at Wembley Park, Stanmore was served by



16tph. A total of 49 trains were required for service. The evening peak service (59 trains) was then extended to operate until 20.00, after which the 2½-minute service (of 49 trains) resumed to and from Stratford until 24.00, after which the service was every 2½-5 minutes until the close of traffic, with the last train departing Stratford for Wembley Park at 01.30.

Stepping back of Train Operators at Stratford took place from 07.10 to 01.30 continuously.

### **Mondays to Fridays 3-10 August**

The service described above operated until 22.00, after which a third 'peak' was scheduled until 23.30. This required 58 trains in service and a 2-minute service was provided west from North Greenwich between 22.03 and 23.35. The service from Stratford was 24tph which meant there was a North Greenwich reverser every 10 minutes.

### **Saturdays 4/11 August**

For the main part of the day until 23.30 Stratford had a 2½-minute 24tph service. However, with additional services between North Greenwich and Willesden Green/Wembley Park, the service provision between North Greenwich and Willesden Green varied during the day, as follows:

24tph – until 16.00	24tph – 18.30 to 22.00
28tph – 16.00 to 18.30	30tph – 22.00 to 23.30

Trains in service varied between 48 and 50, increased to 58 from 16.00 to 18.30 and 22.00 to 23.30.

### **Sundays 5/12 August**

With an earlier than normal start, an enhanced service was provided with 49 or 50 trains in service. The 2½-minute service in the central area was extended to Stratford between 15.40 and 19.00 after 21.40 and in consequence stepping back of Train Operators took place at Stratford from 15.52 to 19.18 and 21.52 to 01.08. At the north end of the line there were Wembley Park reversers every 10 minutes, apart from three at Willesden Green late at night.

### **Mondays to Fridays 29 August to 7 September**

#### **Saturdays 1/8 September**

#### **Sundays 2/9 September**

Services for the Paralympic Games were far more simple, with normal services applying during the day (with the early-morning Sunday starts, of course). On each day, services continued for about an hour later, with the same special service applying in the evenings, as follows:

Monday to Fridays from 22.00	)	Stratford – Willesden Green	3 mins	20tph
Saturdays from 21.00	)	Willesden Green – Stanmore	3-5 mins	15tph
Sundays from 19.00	)			

Note – Willesden Green reversers every 12 mins (5tph).

### **CIRCLE AND HAMMERSMITH & CITY**

The only 'simple' timetable was the Circle and Hammersmith, whose 10-minute pan-handle Circle and 10-minute service to Barking remained the same throughout, with the extended operating hours.

### **DISTRICT LINE**

Normal peak services applied on each Monday to Friday throughout the Olympic period. The non-peak District Line service, however, is also relatively simple to describe because its principles applied on each day. The only exception was on the opening night (27 July) where the closure time was two hours later rather than one hour. On Sundays, some services started up earlier, q.v.

#### **General Service Patterns**

Ealing Broadway – Barking	10 mins	17
Richmond – Upminster	10 mins	20
Wimbledon – Plaistow	20 mins	) 17
Wimbledon – Dagenham East	20 mins	)
Wimbledon – Edgware Road	10 mins	8

**Total trains (Mon-Fri): 62**

Olympia – High Street Kensington (Saturdays and Sundays only)	20 mins	2
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**Total trains (Sat/Sun): 64**

To summarise, the Monday to Friday midday off-peak, Saturday and Sunday daytime 'busy' and the late evening- services were based on the normal off-peak service with the 10-minute Wimbledon – Tower Hill service extended alternately to Plaistow and Dagenham East and the Ealing – Upminster service curtailed at Barking. Along with the Hammersmith & City Line service, a combined 2½-minute (24tph) service was provided through West Ham. It should be remembered that during the transition stage between the different services, changes to the established patterns occurred.

### Service Intervals

Ealing Broadway – Turnham Green	10	
Richmond – Turnham Green	10	
Turnham Green – Earl's Court	5	
Wimbledon – Earl's Court	5	
Earl's Court – Edgware Road	10	
Earl's Court – Gloucester Road	2½-5	
Gloucester Road – Tower Hill	2½	Including Circle Line
Tower Hill – Aldgate East	2½-5	
Aldgate East – Plaistow	2½	Including Hammersmith & City Line
Plaistow – Barking	2½-5	Including Hammersmith & City Line
Barking – Dagenham East	2½-10	
Dagenham East – Upminster	10	
Olympia – High Street Kensington	20	Saturdays and Sundays only

Now that we have reviewed the services directly serving the Olympics, we now take a look at the other lines. In short, the service extensions on these lines were an hour later (two hours later Friday night 27 July) and, apart from the Waterloo & City Line, many services started up earlier on Sundays. For the period of extended services, the patterns of operation applied each night on each line, applicable from around midnight.

### BAKERLOO LINE

	Until 01.00 Friday 27th	After 01.00 Friday 27th	Until 00.30 Other days	After 00.30 Other days
Elephant & Castle – Queen's Park	5	6	5	6
Queen's Park – Harrow & Wealdstone	15	18	15	18

For the 5/15-minute service, 20 trains were required.

### WATERLOO & CITY LINE

The Monday to Friday peak service was slightly reduced with four trains instead of five, and the midday off-peak 6-minute service eliminated the need for stepping back at Waterloo.

Monday to Friday	Peaks	3¼-3½	4 trains
	Midday	6	3 trains
	Evening until 24.00 †	6	3 trains
	After 24.00 ‡	10	2 trains
†	Until 01.00 Friday 27 July.		
‡	After 01.00 Friday 27 July.		
Saturdays/Sundays	08.00 to 24.00	6	3 trains
	After 24.00	10	2 trains

### VICTORIA LINE

The extended services operated as follows, to 03.20 (Friday 27 July) and 02.20 (other nights): 17 trains were required for the extended service.

Brixton – Seven Sisters	5
Seven Sisters – Walthamstow	5-10

### PICCADILLY LINE

Services to Heathrow Terminal 4 finished at the normal time (just after midnight) while the Uxbridge branch service terminated at Rayners Lane during the extended period, apart from the solitary last train from Acton Town to Uxbridge. 50 trains were required for the extended service.	Cockfosters – Arnos Grove	4-8
	Arnos Grove – Acton Town	4
	Acton Town – Northfields	4-10
	Northfields – Heathrow T123	10
	Rayners Lane	20

**METROPOLITAN LINE**

All services 'all stations'.

Service Patterns:

Aldgate – Amersham	30	6 trains
Aldgate – Chesham	30	6 trains
Aldgate – Uxbridge	15	10 trains
Baker Street – Watford	15	8 trains

Combined services:

Aldgate – Baker Street	5-10
Baker Street – Harrow	5
Harrow – Moor Park	5-10

**30 trains**

Further changes because of football traffic at Wembley, requiring an enhanced southbound service for return traffic, applied as follows:

21.40 to 23.10	Sunday 29 July
21.40 to 00.10	Tuesday 31 July
18.55 to 21.55	Wednesday/Monday/Thursday 1/6/7 August.
16.25 to 19.25	Saturdays 4 & 11 August
21.40 to 00.10	Thursday 9 August

**NORTHERN LINE**

A total of 55 trains were required for the extended service, which applied from midnight. Services were based on the 4½-minute pattern, and multiples thereof, as will be seen below, arranged in 27-minute blocks. It is interesting to note that the Mill Hill East shuttle was abandoned during this period in favour of a through service, alternately via Charing Cross and via the City.

VIA CHARING CROSS

Kennington – Camden Town	4½
Camden Town – Golders Green	9
Golders Green – Edgware	9-18
Camden Town – Finchley Central	9
Finchley Central – Mill Hill East	27
Finchley Central – High Barnet	27

VIA BANK

Kennington – Camden Town	4½
Camden Town – Golders Green	9
Golders Green – Edgware	9-18
Camden Town – Finchley Central	9
Finchley Central – Mill Hill East	27
Finchley Central – High Barnet	27

Combined service intervals:

Morden – Kennington	4½	Golders Green – Edgware	4½-9
Via City	4½	Camden Town – Finchley Central	4½
Via Charing Cross	4½	Finchley Central – Mill Hill East	13½
Camden Town – Golders Green	4½	Finchley Central – High Barnet	4½-13

The pattern of operation in each 27-minute 'block' was as follows:

VIA CHARING CROSS

Kennington – Mill Hill East
Kennington – Edgware
Kennington – High Barnet
Kennington – Edgware
Kennington – Finchley Central
Kennington – Golders Green

VIA BANK

Morden – Mill Hill East
Morden – Edgware
Morden – High Barnet
Morden – Edgware
Morden – Finchley Central
Morden – Golders Green

Having now summarised the services offered, we will later see how it all performed, late-July in this issue and after in the following issues .....

## **DOCKLANDS LIGHT RAILWAY THE OLYMPIC SCHEDULES**

Despite the Olympic Games going on for 17 days (27 July to 12 August) and the Paralympic Games for 12 days (29 August to 9 September), special train services for the Docklands Light Railway were scheduled for 58 days, from 14 July to 9 September inclusive.

There were eleven different timetables to cover the 59-day period, each tailor-made for the Olympic season. In all timetables all trains were scheduled to be formed of three vehicles. Almost all of the services were based on a 10/5/2½ minute pattern, which is not quite as frequent as Monday to

Friday peak services in the normal timetables. However, using the “less is more” principle, rather than operate more frequent services with less room for recovery, and to avoid operating a mix of two- and three-vehicle trains, all three-vehicle trains with some room for recovery was undoubtedly thought more desirable during this high-profile season.

In the current full-service Monday to Friday peak service, 48 trains are required for service, the same as on one of the Olympic days, but with a mix of two- and three-vehicle trains, requiring 38x3 and 10x2, or 134 vehicles out of a fleet total of 149. The maximum vehicles required for the Olympic service of all three-vehicle trains was 48 trains, or 144 vehicles, out of a fleet total of 149. No doubt three vehicles were kept aside as a spare train, which would have left just two spare vehicles for maintenance and repairs.

On special event days, all services started at 05.30, including Sundays, and finished at either 01.30 or 02.30 according to the nature of the day in question. The two-hour later finish was scheduled to operate on nine occasions, unlike London Underground, which operated two hours later only on the opening ceremony.

In addition to the special timetables, other special arrangements included:

- Pudding Mill Lane station closed at the end of traffic on Friday 13 July until Wednesday 12 September, to prevent overcrowding and being within the area of the Olympic ‘cordon’.
- From 28 July, Custom House and Prince Regent stations on the Beckton branch became venue stations for ExCeL. Custom House operated as exit only and Prince Regent operated as entrance only until Sunday 12 August.
- From 28 July, Cutty Sark station closed whilst Games events took place in Greenwich Park, generally between 07.00 and 20.00.
- Also from 28 July Pontoon Dock and West Silvertown on the Woolwich Arsenal branch became venue stations for ExCeL. West Silvertown operated as exit only and Pontoon Dock operated as entrance only until Sunday 12 August.

#### TIMETABLE SUMMARY

T/T	Times	Trains	Veh's	Dates
A	05.30 – 00.30	47	141	14.07.12 21.07.12 18.08.12 25.08.12 27.08.12
B	07.00 – 23.30	47	141	15.07.12 22.07.12 19.08.12 26.08.12
C	05.30 – 00.30	46	138	16.07.12 17.07.12 18.07.12 19.07.12 20.07.12 23.07.12 24.07.12 26.07.12 13.08.12 14.08.12 15.08.12 16.08.12 17.08.12 20.08.12 21.08.12 22.08.12 23.08.12 24.08.12 28.08.12
D	05.30 – 02.30	46	138	25.07.12 27.07.12 29.08.12
E	05.30 – 01.30	46	138	28.07.12 29.07.12 04.08.12 05.08.12
F	05.30 – 01.30	48	144	30.07.12
G	05.30 – 01.30	46	138	31.07.12 01.08.12 02.08.12 03.08.12 06.08.12 07.08.12
H	05.30 – 02.30	46	138	08.08.12 09.08.12 10.08.12
I	05.30 – 02.30	47	141	11.08.12 12.08.12
J	05.30 – 01.30	46	138	30.08.12 31.08.12 03.09.12 04.09.12 05.09.12 06.09.12 07.09.12
K	05.30 – 01.30	46	138	01.09.12 02.09.12 08.09.12
K	05.30 – 02.30	46	138	09.09.12

#### THE TIMETABLES

TIMETABLE ‘A’. 05.30 – 00.30.

Date	05.30 to 08.30			08.30 to 00.30		
	(mins)	Service	Trains	(mins)	Service	Trains
14.07.12 Sat	10	BAN – LEW	6x3	5	BAN – LEW	12x3
21.07.12 Sat	10	BAN – BEC	7x3	10	BAN – BEC	7x3
18.08.12 Sat	10	TOG – PRR	5x3	10	TOG – PRR	5x3
25.08.12 Sat	10	STR – CAW	4x3	5	STR – GRE	12x3
27.08.12 Mon	10	STI – WOA	6x3	5	STI – WOA	11x3
		28x3			47x3	
		84 vehicles			141 vehicles	

## TIMETABLE 'B'. 07.00 – 23.30.

Date	(mins)	07.00 to 10.30 Service	Trains	(mins)	10.30 to 23.30 Service	Trains
15.07.12 Sun	10	BAN – LEW	6x3	5	BAN – LEW	12x3
22.07.12 Sun	10	BAN – BEC	7x3	10	BAN – BEC	7x3
19.08.12 Sun	10	TOG – PRR	5x3	10	TOG – PRR	5x3
26.08.12 Sun	10	STR – CAW	4x3	5	STR – GRE	12x3
	10	STI – WOA	5x3	5	STI – WOA	11x3
		27x3			47x3	
		81 vehicles			141 vehicles	

## TIMETABLE 'C'. 05.30 – 00.30.

Date	(mins)	05.30 to 06.30 Service	Trains	(mins)	AM and PM Peaks Service	Trains
16-20.07.12 M-F	10	BAN – LEW	6x3	5	BAN – LEW	12x3
23.07.12 Mon	10	BAN – BEC	7x3	10	BAN – BEC	7x3
24.07.12 Tue	10	TOG – WOA	7x3	10	TOG – WOA	7x3
26.07.12 Thur	10	STR – CAW	4x3	10	STR – CAW	4x3
13-17.08.12 M-F	10	STI – PRR	4x3	10	STR – GRE	6x3
20-24.08.12 M-F				10	STI – WOA	6x3
28.08.12 Tue				10	STI – PRR	4x3
		28x3			46x3	
		84 vehicles			138 vehicles	
	(mins)	10.00 to 16.00 Service	Trains	(mins)	20.00 to 00.30 Service	Trains
	5	BAN – LEW	12x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	TOG – WOA	7x3	10	TOG – WOA	7x3
	10	STR – GRE	6x3	10	STR – GRE	6x3
	10	STI – WOA	6x3	10	STI – WOA	6x3
	10	STI – PRR	4x3	10	STI – PRR	5x3
		42x3			37x3	
		126 vehicles			111 vehicles	

## TIMETABLE 'D'. 05.30 – 02.30.

Date	(mins)	05.30 to 06.30 Service	Trains	(mins)	AM and PM Peaks Service	Trains
25.07.12 Wed	10	BAN – LEW	6x3	5	BAN – LEW	12x3
27.07.12 Fri	10	BAN – BEC	7x3	10	BAN – BEC	7x3
29.08.12 Wed	10	TOG – WOA	7x3	10	TOG – WOA	7x3
	10	STR – CAW	4x3	10	STR – CAW	4x3
	10	STI – PRR	4x3	10	STR – GRE	6x3
				10	STI – WOA	6x3
				10	STI – PRR	4x3
		28x3			46x3	
		84 vehicles			138 vehicles	
	(mins)	10.00 to 16.00 Service	Trains	(mins)	20.00 to 02.30 Service	Trains
	5	BAN – LEW	12x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	TOG – WOA	7x3	10	TOG – WOA	7x3
	10	STR – GRE	6x3	5	STR – LEW	14x3
	10	STI – WOA	6x3	10	STI – WOA	6x3
	10	STI – PRR	4x3	10	STI – PRR	4x3
		42x3			44x3	
		126 vehicles			132 vehicles	

## TIMETABLE 'E'. 05.30 – 01.30.

Date	05.30 to 08.00			08.00 to 23.00		
	(mins)	Service	Trains	(mins)	Service	Trains
28.07.12 Sat	10	BAN – LEW	6x3	10	BAN – LEW	6x3
29.07.12 Sun	10	BAN – BEC	7x3	10	BAN – BEC	7x3
04.08.12 Sat	10	TOG – PRR	5x3	10	BAN – PRR	5x3
05.08.12 Sun	10	STR – CAW	4x3	10	TOG – PRR	5x3
	10	STI – WOA	6x3	5	STR – GRE	12x3
				10	STI – WOA	11x3
		28x3			46x3	
		84 vehicles			138 vehicles	
	23.00 to 00.30			00.30 to 01.30		
	(mins)	Service	Trains	(mins)	Service	Trains
	10	BAN – LEW	6x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	BAN – PRR	5x3	10	TOG – PRR	5x3
	10	TOG – PRR	5x3	10	STR – GRE	6x3
	10	STR – GRE	6x3	5	STI – WOA	11x3
	5	STI – WOA	11x3			
		40x3			35x3	
		120 vehicles			105 vehicles	

## TIMETABLE 'F'. 05.30 – 01.30.

Date	05.30 to 06.30			06.30 to 09.30		
	(mins)	Service	Trains	(mins)	Service	Trains
30.07.12 Mon	10	BAN – LEW	6x3	5	BAN – LEW	13x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	TOG – WOA	7x3	10	TOG – WOA	7x3
	10	STR – CAW	4x3	10	STR – GRE	6x3
	10	STI – PRR	4x3	10	STI – WOA	6x3
				5	STI – PRR	7x3
		28x3			46x3	
		84 vehicles			138 vehicles	
	09.30 to 20.00			20.00 to 23.00		
	(mins)	Service	Trains	(mins)	Service	Trains
	5	BAN – LEW	12x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	TOG – LEW	6x3	10	BAN – PRR	5x3
	10	TOG – PRR	5x3	5	TOG – PRR	10x3
	10	STR – GRE	6x3	10	STR – GRE	6x3
	5	STI – WOA	10x3	5	STI – WOA	11x3
	10	CAT – PRR *	2x3			
		48x3			45x3	
		144 vehicles			135 vehicles	
	23.00 to 00.30			00.30 to 01.30		
	(mins)	Service	Trains	(mins)	Service	Trains
	10	BAN – LEW	6x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	BAN – PRR	6x3	10	TOG – PRR	5x3
	10	TOG – PRR	5x3	10	STR – GRE	6x3
	10	STR – GRE	6x3	5	STI – WOA	10x3
	5	STI – WOA	10x3			
		40x3			34x3	
		120 vehicles			102 vehicles	

\* Canning Town (Low Level) – Prince Regent.

## TIMETABLE 'G'. 05.30 – 01.30.

Date	05.30 to 06.30			06.30 to 15.00		
	(mins)	Service	Trains	(mins)	Service	Trains
31.07.12 Tue	10	BAN – LEW	6x3	5	BAN – LEW	13x3
01.08.12 Wed	10	BAN – BEC	7x3	10	BAN – BEC	7x3
02.08.12 Thur	10	TOG – WOA	7x3	10	TOG – WOA	7x3
03.08.12 Fri	10	STR – CAW	4x3	10	STR – GRE	6x3
06.08.12 Mon	10	STI – PRR	4x3	10	STI – WOA	6x3
07.08.12 Tue				5	STI – PRR	7x3
		28x3 84 vehicles			46x3 138 vehicles	
	15.00 to 20.00			20.00 to 23.00		
	(mins)	Service	Trains	(mins)	Service	Trains
	5	BAN – LEW	12x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	5	TOG – PRR	10x3	10	BAN – PRR	5x3
	10	STR – GRE	6x3	5	TOG – PRR	10x3
	5	STI – WOA	11x3	10	STR – GRE	6x3
		46x3 138 vehicles		5	STI – WOA	11x3
					45x3 135 vehicles	
	23.00 to 00.30			00.30 to 02.30		
	(mins)	Service	Trains	(mins)	Service	Trains
	10	BAN – LEW	6x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	BAN – PRR	6x3	10	TOG – PRR	5x3
	10	TOG – PRR	5x3	10	STR – GRE	6x3
	10	STR – GRE	6x3	5	STI – WOA	11x3
	5	STI – WOA	11x3			
		41x3 123 vehicles			35x3 105 vehicles	

## TIMETABLE 'H'. 05.30 – 02.30.

Date	05.30 to 06.30			06.30 to 15.00		
	(mins)	Service	Trains	(mins)	Service	Trains
08.08.12 Wed	10	BAN – LEW	6x3	5	BAN – LEW	13x3
09.08.12 Thur	10	BAN – BEC	7x3	10	BAN – BEC	7x3
10.08.12 Fri	10	TOG – WOA	7x3	10	TOG – WOA	7x3
	10	STR – CAW	4x3	10	STR – GRE	6x3
	10	STI – PRR	4x3	10	STI – WOA	6x3
		28x3 84 vehicles		5	STI – PRR	7x3
					46x3 138 vehicles	
	15.00 to 20.00			21.00 to 23.00		
	(mins)	Service	Trains	(mins)	Service	Trains
	5	BAN – LEW	12x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	5	TOG – PRR	10x3	10	BAN – PRR	5x3
	10	STR – GRE	6x3	10	STR – GRE	6x3
	5	STI – WOA	11x3	5	STI – WOA	11x3
		46x3 138 vehicles		5	TOG – PRR	10x3
					45x3 135 vehicles	
	23.00 to 00.30			00.30 to 02.30		
	(mins)	Service	Trains	(mins)	Service	Trains

	10	BAN – LEW	6x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	BAN – PRR	5x3	10	TOG – PRR	5x3
	10	TOG – PRR	5x3	10	STR – GRE	6x3
	10	STR – GRE	6x3	5	STI – WOA	11x3
	5	STI – WOA	11x3			
		40x3			35x3	
		120 vehicles			105 vehicles	

## TIMETABLE 'I'. 05.30 – 02.30.

Date	(mins)	05.30 to 08.00 Service	Trains	(mins)	08.00 to 12.00 Service	Trains
11.08.12 Sat	10	BAN – LEW	6x3	5	BAN – LEW	12x3
12.08.12 Sun	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	TOG – PRR	5x3	10	TOG – PRR	5x3
	10	STR – CAW	4x3	10	STR – GRE	6x3
	10	STI – WOA	6x3	5	STI – WOA	11x3
		28x3			41x3	
		84 vehicles			123 vehicles	
	(mins)	12.00 to 21.00 Service	Trains	(mins)	21.00 to 02.30 Service	Trains
	5	BAN – LEW	12x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	TOG – PRR	5x3	10	TOG – PRR	5x3
	5	STR – GRE	12x3	5	STR – LEW	14x3
	5	STI – WOA	11x3	5	STI – WOA	11x3
		47x3			43x3	
		141 vehicles			129 vehicles	

## TIMETABLE 'J'. 05.30 – 01.30.

Date	(mins)	05.30 to 06.30 Service	Trains	(mins)	06.30 to 10.00 Service	Trains
30.08.12 Thur	10	BAN – LEW	6x3	5	BAN – LEW	12x3
31.08.12 Fri	10	BAN – BEC	7x3	10	BAN – BEC	7x3
03.09.12 Mon	10	TOG – WOA	7x3	10	TOG – WOA	7x3
04.09.12 Tue	10	STR – CAW	4x3	10	STR – CAW	4x3
05.09.12 Wed	10	STI – PRR	4x3	10	STR – GRE	6x3
06.09.12 Thur				10	STI – WOA	6x3
07.09.12 Fri				10	STI – PRR	4x3
		28x3			46x3	
		84 vehicles			138 vehicles	
	(mins)	10.00 to 15.00 Service	Trains	(mins)	15.00 to 20.00 Service	Trains
	5	BAN – LEW	12x3	5	BAN – LEW	12x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	TOG – WOA	7x3	10	TOG – PRR	5x3
	10	STR – GRE	6x3	10	STR – CAW	4x3
	10	STI – WOA	6x3	10	STR – GRE	6x3
	10	STI – PRR	4x3	5	STI – WOA	11x3
		42x3			45x3	
		126 vehicles			135 vehicles	

	(mins)	20.00 to 00.30 Service	Trains	(mins)	00.30 to 01.30 Service	Trains
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	10	BAN – LEW	6x3	10	BAN – LEW	6x3
	10	BAN – BEC	7x3	10	BAN – BEC	7x3
	10	BAN – PRR	5x3	10	TOG – PRR	5x3
	10	TOG – PRR	5x3	10	STR – GRE	6x3
	10	STR – GRE	6x3	5	STI – WOA	11x3
	5	STI – WOA	11x3			
		40x3			35x3	
		120 vehicles			105 vehicles	

TIMETABLE 'K'. 05.30 – 01.30 (02.30 Sunday 09.09.12).

Date	05.30 to 08.00			08.00 to 00.30		
	(mins)	Service	Trains	(mins)	Service	Trains
01.09.12 Sat	10	BAN – LEW	6x3	10	BAN – LEW	6x3
02.09.12 Sun	10	BAN – BEC	7x3	10	BAN – BEC	7x3
08.09.12 Sat	10	TOG – PRR	5x3	10	BAN – PRR	5x3
09.09.12 Sun †	10	STR – CAW	4x3	10	TOG – PRR	5x3
	10	STI – WOA	6x3	5	STR – GRE	12x3
				5	STI – WOA	11x3
		28x3			46x3	
		84 vehicles			138 vehicles	
	00.30 to 01.30 †			† To 02.30 on 09.09.12		
	(mins)	Service	Trains			
	10	BAN – LEW	6x3			
	10	BAN – BEC	7x3			
	10	TOG – PRR	5x3			
	5	STR – GRE	12x3			
	5	STI – WOA	11x3			
		41x3				
		123 vehicles				