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LLDC Local Plan Review Public Transport Capacity

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1. Background

- 1.1 In relation to transport, matters 7.1 and 7.2 raise questions regarding the capacity of public transport modes to accommodate the proposed development within the Plan period. This note sets out the context of the existing station, expected transport improvements and the impact of both Local Plan growth and London-wide pressures on the transport network.
- 1.2 It is acknowledged that both rail lines and stations in the LLDC area are very busy at peak times and further growth, without measures to mitigate the impacts, would worsen this position. While LLDC policies and requirements will continue to promote walking and cycling and this will have some contribution towards limiting pressure on the rail network, this is not expected to be sufficient to address the underlying issues of growth in rail use.
- 1.3 Stratford is, however, particularly well placed to accommodate high levels of travel demand. The wide range of high capacity rail lines provides for high levels of accessibility to most of London and for many journeys offers options and flexibility of travel choices.

2. Existing Capacity Issues

- 2.1 It is important to set the LLDC area and Local Plan projections into a wider context in considering available capacity. Although trips to and from the LLDC area are significant, in relation to overall use of public transport passing through the LLDC area, trips generated from the LLDC area are a small proportion of total use. For example, ignoring the majority of passengers on most routes through the area that do not alight or board services within the area, the use of Stratford regional station itself is used by as many people interchanging between trains with no other reason to visit the station than by people coming or going from the LLDC area. It is forecast that in the morning peak 56% of station users will be interchanging, although this falls to 42% in the evening peak. In addition, many of those passengers boarding or alighting trains have accessed the station from beyond the LLDC area on, in particular, local bus services.
- 2.2 The key stations and routes serving the LLDC area include: Stratford Regional station with the Central Line, Jubilee Line, two branches of the DLR, the London Overground and National Rail/TfL Rail services; Stratford International with High Speed 1 and DLR services; Bromley-by-Bow with the District Line; Pudding Mill Lane DLR station; and Hackney Wick London Overground station, Train capacity is currently under pressure but in normal operation copes well with current demands.
- 2.3 In relation to station crowding, recent works at a number of stations mean that these stations are well equipped to cope with both current demands and potential growth. This includes:
- 2.4 Pudding Mill Lane DLR station was re-constructed to accommodate Crossrail and at the same time provide major capacity improvements;
- 2.5 Hackney Wick London Overground station has recently seen major reconstruction works to provide improved access and a new ticket hall, which also enables better management of passenger flows; and
- 2.6 Bromley-by-Bow station has undergone improvement works, with further works planned to better accommodate increased use from nearby development proposals.
- 2.7 Stratford station is, however, heavily congested at peak times, with station management used to address localised areas of crowding. While this works well during normal operation, for major London Stadium events Stratford Regional Station, in particular, suffers from severe crowding with intensive management control measures put in place, particularly of departures from the Stadium. While this affects the station itself, the greater impact is on management of queues seeking to access the station. This requires temporary traffic management and/or road closures but this is a well-established procedure. While this results in significant queueing and extended journey times, the station and local area operates safely and such short-term queueing is inevitable for any major event venue such as the London Stadium. It is important to note that this is only an issue for large scale events at the London Stadium. Relatively smaller scale events such as those at the Copper Box, the Velodrome or events in the Queen Elizabeth Olympic Park are effectively managed through normal station operations. There are management arrangements in place with co-ordinated working between the Legacy Corporation, the London Stadium, Westfield and IQL in place. The Draft Night Time Economy SPD seeks to promote wider management and coordination arrangements with transport within the Legacy Corporation area.

3. Future Pressures and Capacity Improvements

- 3.1 Much of the future development pressure resulting from the Local Plan proposals will come from existing permitted development. In considering those proposals, the LLDC, Transport for London (TfL) and the local boroughs have considered the potential impacts on transport generally, but specifically public transport. This has both recognised the limits on highway capacity and the policy requirements to seek to limit growth in car use and consider the consequent impact on public transport services – together with the need to ensure walking and cycling routes are convenient and attractive to use.
- 3.2 The largest single improvement to transport capacity serving the LLDC area will be the introduction of the Elizabeth Line. This will provide substantial additional capacity serving Stratford Regional station and much of east London, which has the potential to improve conditions in a number of ways:
- Increasing capacity into, through and from the Stratford area to accommodate growth in both the wider east London area and specifically that within the Stratford area of the LLDC area;
 - Providing alternative routes that will very substantially relieve pressure on the Central Line, but will also help relieve other routes including the Jubilee Line and the DLR to Canary Wharf; and
 - Substantially reducing interchange between trains at Stratford Regional station, relieving overcrowding at the station.
- 3.3 While the precise way in which the Elizabeth Line affects travel behaviour will not be clear until users have adjusted to its introduction, the additional capacity and travel options offered by it will enable many travellers to divert away from more heavily used services and from Stratford Regional station at congested times. Modelling by TfL identifies substantial reductions in crowding on trains through Stratford station resulting from the introduction of the Elizabeth Line.
- 3.4 Alongside the Elizabeth Line, TfL has proposals for enhancing frequencies on a number of routes, including the Jubilee Line, and also for increasing the capacity of the DLR Poplar branch. However, while these would provide significant benefits, based upon TfL's analysis these are not considered essential and are not currently funded.
- 3.5 However, while the Elizabeth Line will improve conditions for rail passengers from the LLDC area it should be recognised that in due course its initial large impact on available capacity will diminish as wider development across east London comes forward. This highlights that addressing public transport capacity in the LLDC area must be part of the strategy for addressing wider growth across east London, which is a key part of LLDC's engagement with TfL. The impact of London Plan growth projections on public transport capacity has been examined by TfL in considering the need for wider initiatives. This has concluded that with the introduction of the Elizabeth Line together with expected improvements to train frequencies on a number of lines, rail services will remain crowded but within acceptable bounds. The draft Legacy Corporation Local Plan is supported by a Transport Study (LEB13) and a further Transport Explanatory Note (LD29) which further sets out the approach to capacity.

- 3.6 Alongside existing station capacity initiatives and the introduction of the Elizabeth Line, a number of initiatives are being brought forward to help address current and prospective congestion at Stratford station. These are included within the Infrastructure Delivery Plan Long List of Projects and include a station entrance at the Carpenter's Estate side of the station amongst other interventions. Most advanced are the provision of additional entrances and measures to remove pinch points within the station. Funding and planning approval for a new South-west entrance to the station is already agreed, together with relocation of a lift to give significant relief to the western subway. Of the total cost of £9m, this is to be funded through £1.5m from CIL receipts, £2.5m from S106 agreements (including £1.8m from the East Bank development), £4m from GLA SIF and a £1m contribution from LB Newham. Potential further entrances to reduce the congestion on current routes are also well advanced. For the longer term, TfL has developed a major congestion relief scheme involving a new interchange route between lines. This is, however, primarily required to accommodate wider growth rather than LLDC specific development. TfL consider this is likely to be required by the mid to late 2020s and are developing the business case and identifying the necessary funding.
- 3.7 A key element to managing the local impacts of new developments is securing through the planning process appropriate design (including limiting car access) and contributions to managing and mitigating adverse transport impacts. This includes funding for measures to: improve rail capacity such as the additional entrances to Stratford station, improvements to Bromley-by-Bow station and the recent Hackney Wick improvements; provide new or enhanced bus services; and improve walking and cycling routes.
- 3.8 However, funding is also secured where appropriate for management measures and to help manage the impacts on the rail networks. As an example, this includes funding of just over £0.7m from the recently approved East Bank development for additional station staffing and signing to help manage the station at periods of high demand.
- 3.9 This broader approach to mitigation of transport impacts will continue and, particularly for major travel generators, is likely to require a combination of provision or funding for infrastructure and management measures to help existing infrastructure capabilities to be used to their greatest extent. As highlighted by the Inspector, large scale events present particular challenges in this respect due to the intense transport impacts at start and finish of events. Appropriate measures will be required for major proposals of this kind to ensure that they can be effectively managed, their transport impacts minimised and, particularly, that event times are coordinated across major venues in the LLDC area. The effective management of visitors to events at the London Stadium demonstrates that even very large-scale events can be accommodated successfully.

4. Summary

- 4.1 The level of new development envisaged in the Local Plan adds to but is only part of the pressure on rail transport in the LLDC area, with wider London-wide development being the major contributor. Analysis by TfL, nonetheless indicates that with the introduction of Elizabeth Line services these combined impacts can be accommodated.
- 4.2 Recent and planned works at Pudding Mill Lane, Bromley-by-Bow and Hackney Wick provide the capacity for these stations to accommodate projected demands. However, Stratford Regional station currently suffers from congestion issues. The introduction of the Elizabeth Line can be expected to relieve a number of those pressures. Nonetheless, without works to enhance capacity and remove bottlenecks, congestion in the station would be likely to increase to unacceptable levels. This is an issue for TfL and Network Rail given the causes are not specifically, or even primarily, related to development in the LLDC and Stratford area. The LLDC has, nonetheless, secured funding for a number of measures to manage and reduce congestion to acceptable levels in the station. The proposed Local Plan policies will maintain this requirement for developments to contribute appropriately to managing the impacts on, in particular, Stratford station and support TfL and Network Rail in seeking longer term solutions to the station's congestion issues.