

Job Name: Stag Brewery, Mortlake
Job No: 38262
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Subject: Update of Rail Impact Assessment for Mortlake Station

1.1 Introduction

1.1.1 This Technical Note has been prepared following comments received from LBRuT highway officer regarding the reduction of the number of trains from Mortlake Train station and the impact of this with the proposed development. Comments from LBRuT officer as follows:

In numerous places, the TA says that there are 4 trains per hour from Mortlake to London Waterloo (via Putney) all day. This is not the case. Since the pandemic, there are only 2 trains per hour off-peak. Moreover, South Western Railway has proposed that this reduction to 2 trains per hour is made permanent in December 2022. Predictions of rail usage and statements about the PTAL need to be reassessed.

1.1.2 The Transport Assessment (TA) issued with the planning application assessed the impact on rail use using pre-covid 19 patronage data when there were four trains leaving Mortlake Station towards London in the AM peak hour. Since Covid 19 there has been a large shift in work travel with a significant number of people now working from home or travelling during off-peak times and train services have reduced to two per hour to London.

1.1.3 The TA considered the pre-Covid situation to be a worst-case assessment, however LBRuT have raised concerns that with the reduction in services to two trains per hour this may not be reflective of the worst-case assessment. This technical note therefore provides analysis of the post Covid patronage levels with 2 trains per hour and provides an updated assessment of the impact of the development.

1.2 Patronage Data from Mortlake Station

1.2.1 Patronage data has been obtained for Mortlake Station for both pre and post Covid-19. Data obtained from Network Rail is from April to March 2017 / 2018 and 2020 / 2021 and is summarised in Table 1 below.

Table 1 Mortlake Station Patronage Data

Year	2020-21 Entries and exits - full	2020-21 Entries and exits - reduced	2020-21 Entries and exits - season	2020-21 Entries and exits - TOTAL
2017 / 2018	517,651	580,741	823,100	1,897,712
2020 / 2021	143,924	188,272	106,736	438,932
Difference	-72%	-68%	-87%	-77%

- Full – Estimated entries and exits made at the station using a full price ticket
- Reduced - Estimated entries and exits made at the station using a reduced-price ticket

- Season - Estimated entries and exits made at the station using a season ticket
- Total - Estimated total number of entries and exits made at the station

1.2.2 Table 1 clearly shows that there has been a significant reduction in train use since Covid 19 with an overall 77% reduction in train passengers at Mortlake Station.

1.2.3 In addition, further analysis of the entire Network Rail network across all stations suggests an average reduction of 76% train use, which is reflective to the reduction at Mortlake Station of 77%.

1.3 Train Capacity

1.3.1 The station has a total of four entrances. The main entrance and ticket office is on the south side of the railway but there is also an access on the north side accessed from Mortlake Green through the builder’s yard. The two platforms are also connected via a footbridge which has two sets of stairs, west facing stairs that act to connect the two platforms and east facing stairs from Sheen Lane that provide a secondary means of access into the station but also provide an external route along Sheen Lane avoiding the level crossing.

1.3.2 Passenger flows within the station itself are bi-directional with only minor conflict between passengers boarding and alighting. As there is only one entrance/exit point at the eastern end of each platform this reduces the number of passenger movements possible and therefore reduces conflict within the station.

1.3.3 The movement of pedestrians is also not impeded by gate lines. This means that the movement of pedestrians within Mortlake station should be significantly more free flowing than for a typical station that NR’s guidance is based on. The assessment has taken account of the detailed characteristics of the station, including the tendency to board the front carriages of any train.

1.3.4 Figures provided by Network Rail for the number of passengers boarding in the AM peak hour in 2017 have been factored by 77% in line with the average reduction in train use throughout the day, as per the Mortlake Station patronage data that is available. The estimated train numbers are presented in table 1.

Table 1: Number of passengers boarding and alighting per hour – AM peak (Existing + Development)

Source	Platform 1 - Eastbound		Platform 2 Westbound	
	Boarding	Alighting	Boarding	Alighting
2017 NR Estimate	482	67	133	227
2022 Estimate (calculated)	111	15	31	52
Development Trips	73	112	29	43
Total 2022 + Dev	184	127	60	95

1.3.5 Network Rail previously confirmed that there was adequate train capacity with the longer trains and that was with both the development and existing trips at Mortlake Station. Now the number of train users has reduced by 77%, the total development trips and train users is significantly lower than the network Rail number of passengers in 2017 by more than 50%. This suggests that there is sufficient capacity on the trains with only two services per hour.

1.4 Station Capacity

- 1.4.1 In accordance with the NR's Station Capacity Assessment Guidance, the ability of the platforms to accommodate both the existing and future demand taking account of the different zones (Zone A - Yellow Line (safety) Zone, Zone B - Boarding/Alighting Zone, Zone C - Circulation Zone and Zone D - the Activity Zone) taking account of the uneven platform loading has been assessed.
- 1.4.2 The outcome of this analysis is summarised within Table 3 below. This gives a minimum requirement for the overall platform width of 2.32m.

Table 3: Existing and Future Platform Width Requirement

Requirement	Existing Requirement (m)	Future Requirement (m)
Zone A	1	1
Zone B	0.65	1.02
Zone C	0.00	0.00
Zone D	0.30	0.30
Total	1.95	2.32

- 1.4.3 The change in requirements for Zone B is as a result of increased patronage on trains as a result of the Proposed Development.
- 1.4.4 The station meets both the existing and future requirements as it has a critical platform width of 4.67m which is over 2m wider than the minimum requirement.

1.5 Summary

- 1.5.1 The updated rail assessment carried out indicates that there is sufficient capacity for forecasted future passenger numbers in terms of station infrastructure and train capacity in 2022. With the 77% decrease in train users at Mortlake station the reduction of train services to two per hour shows that the trains are still operating with more spare capacity than pre-covid.
- 1.5.2 In addition, it is also noted that Network Rail have raised no objection to the development proposals.