APPENDIX 9.2
ADDITIONAL ASSESSMENT SCENARIO: CONTINUED OPERATION OF TESCO OSTERLEY

Appendix 9.2 – Additional Assessment Scenario: Continued operation of Tesco Osterley

Introduction

9.1. This is Appendix 9.2 of EIA chapter 9: Transport and Accessibility which seeks to assess the impact of the proposed new Tesco store and residential development at the Homebase Site, Syon Lane assuming there is no redevelopment of the existing Osterley Tesco Site nearby, also on Syon Lane. This is therefore a theoretical assessment scenario whereby the existing Tesco store is retained and two Tesco stores are operating simultaneously on either side of the A4 Great West Road. In reality this is very unlikely to materialise for the reason given in paragraph 9.2 below. Notwithstanding, the assessment of this scenario is provided herein.

9.2. The Osterley Tesco and Homebase Sites are the subject of separate planning applications, and both applications are accompanied by separate environmental statements. It is, however, a factual reality that the schemes are interdependent. The new Tesco store opening on the existing Homebase site, and the demolition of the existing Tesco store to make way for new residential development are dependent on the other respective development proceeding. There would not be two Tesco stores open for trading at the same time on these sites, and planning obligations are proposed to control this scenario and prevent this from taking place. An obligation binding the existing Tesco site is proposed to restrict demolition of the existing Tesco store until trading commences at the replacement Tesco store. Further, an obligation binding the existing Homebase site is proposed to restrict the new store from commencing trading until trading has ceased at the existing Tesco store.

9.3. This Appendix considers the implications of construction traffic in 2023 (peak construction) and the operational traffic in 2026, which is when the Homebase Development should be completed and occupied. All the traffic data has therefore been calculated for the following:

- 2023 Baseline: Surveyed traffic flows with background growth;
- 2023 Baseline + Construction traffic: Assumes that the existing Tesco store and Petrol Filling Station (PFS) remain operational (no redevelopment of the existing Osterley Tesco site);
- 2026 Baseline: Surveyed traffic flows with background growth; and
- 2026 Baseline + Development traffic: Assumes that the existing Tesco store and PFS remain operational (no redevelopment of the existing Osterley Tesco site).

9.4. Please refer to the main body of ES Chapter 9 for full details of:

- Details of consultation;
- Assessment of scope;
- Baseline characterisation;
- The assessment methodology;
- The assessment criteria;
- Assumptions and limitations; and
- Sensitivity of receptors.

Assessment of Effects

Demolition and Construction Phase

9.5. The assessment of demolition and construction traffic has been assessed for the future year of 2023, at which time peak site construction activity is anticipated. This assessment is contained in Table 1.

Table 1: Demolition and Construction Traffic (2023)

No.	Receptor Link	Link Sensitivity	2023 Background Flows 12hr AAWT (07:00 – 19:00) flows		2023 Background Flows + Demolition and Construction flows 12hr AAWT (07:00 – 19:00)		Percentage Increase	
			All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs
1	A310 Twickenham Road (south of A315, London Road)	Medium	16044	1333	15915	1331	-0.80%	-0.17%
2	A315, London Road (west of Syon Lane/ Twickenham Road junction)	Medium	8445	1033	8316	1031	-1.53%	-0.22%
3	A315, London Road (east of Syon Lane/ Twickenham Road junction)	Medium	11172	1339	11043	1337	-1.15%	-0.17%

4	Syon Lane - North of A315, London Road	Medium	14130	737	13743	730	-2.74%	-0.91%
5	Syon Lane - South-east of Homebase Site Access	Medium	16243	1091	15928	1156	-1.94%	5.94%
6	A4 - East of Syon Lane	Low	41613	1872	41173	1917	-1.06%	2.42%
7	A4 - West of Syon Lane	Low	33776	1561	33651	1681	-0.37%	7.71%
8	Syon Lane, North of A4	Medium	20745	654	20580	651	-0.79%	-0.48%
9	Syon Lane - South-east of Tesco Access (between Grant Way and Tesco)	Medium	16392	836	16228	833	-1.00%	-0.37%
10	Syon Lane, North of Tesco Site Access	Medium	15253	383	15088	380	-1.08%	-0.82%
11	Northumberland Avenue	High	2823	43	2815	43	-0.25%	-0.27%

9.6. In accordance with GEART, only highly sensitive links that show a greater than 10% increase in total traffic flows (or HGV component) or, for all other links, a greater than 30% increase in total traffic (or the HGV component) are considered when assessing the traffic effect upon receptors.

9.7. It is noted from Table 1 that all links with low, medium or high sensitivity fall below GEART screening thresholds.

9.8. An assessment of driver (and bus service) delay has been screened out for this assessment and does not form part of the modelling process that has been discussed with TfL and the LBH.

9.9. Table 9.12 of the ES Chapter identifies that personal injury collision clusters occur on all assessed links, making each link highly sensitive in relation to road safety. Table 1 however identifies that for this scenario general traffic, and HGV flows, would not increase by more than 10% on any link and as such no links are considered further in this assessment in relation to accidents and safety.

9.10. For links 1, 2, 3, 4, 8, 9, 10 and 11 a reduction in traffic flow (including the HGV component) is anticipated and the resulting effect would be direct, medium term, temporary **Negligible Beneficial** for severance, pedestrian and cyclist delay, pedestrian amenity, fear and intimidation and accidents and safety.

9.11. For links 5, 6 and 7 an increase in the HGV component of the traffic flow means the resulting effect would be direct, medium term, temporary **Negligible Adverse** for severance, pedestrian and cyclist delay, pedestrian amenity, fear and intimidation and accidents and safety.

Operational Phase

9.12. Table 2 summarises the total daily movements of the completed Development traffic across the highway network for the first year of full occupation, assumed to be 2026. For comparison purposes, the forecast future background traffic flows for 2026 are provided in Table 2, and this future base scenario accounts for traffic growth based on LoHAM.

Table 2: Completed Development 24-Hour AADT Traffic Flows (2026)

No.	Receptor Link	Link Sensitivity	2026 Background Flows 24hr AADT flows		2026 Background Flows + Complete and Operational Development flows 24hr AADT		Percentage Increase	
			All Vehicles	HGVs	All Vehicles	HGVs	All Vehicles	HGVs
1	A310 Twickenham Road (south of A315, London Road)	Medium	21988	1630	22419	1634	1.96%	0.27%
2	A315, London Road (west of Syon Lane/ Twickenham Road junction)	Medium	10788	1310	11219	1315	4.00%	0.37%
3	A315, London Road (east of Syon Lane/ Twickenham Road junction)	Medium	14514	1774	14945	1778	2.97%	0.25%
4	Syon Lane - North of A315, London Road	Medium	19472	829	20766	843	6.65%	1.70%
5	Syon Lane - South-east of Homebase Site Access	Medium	22892	1556	24186	1570	5.65%	0.88%
6	A4 - East of Syon Lane	Low	52264	2341	54365	2365	4.02%	1.02%

7	A4 - West of Syon Lane	Low	42862	1969	44713	1990	4.32%	1.05%
8	Syon Lane, North of A4	Medium	27680	873	30725	903	11.00%	3.47%
9	Syon Lane - South-east of Tesco Access (between Grant Way and Tesco)	Medium	22175	1199	25220	1228	13.73%	2.44%
10	Syon Lane, North of Tesco Site Access	Medium	20964	512	24009	543	14.52%	5.98%
11	Northumberland Avenue	High	3672	54	3712	55	1.09%	1.05%

9.13. In accordance with GEART, only sensitive links that show a greater than 10% increase in total traffic flows (or HGV component) or, for all other links, a greater than 30% increase in total traffic or the HGV component are considered when assessing the traffic impact upon receptors.

9.14. It is noted from Table 2 that all Links fall below GEART screening thresholds of 30%, and 10% for links of high sensitivity, and therefore the significance of effect on these links can be considered to be direct, long term, permanent and **Negligible Beneficial** for severance, pedestrian and cyclist delay, pedestrian amenity, fear and intimidation and accidents and safety.

9.15. An assessment of driver (and bus service) delay has been screened out for this assessment for this scenario and does not form part of the modelling process that has been discussed with TfL and the LBH. This has been screened out for the reasons outlined in paragraph 9.2 of this Appendix. However, the modelling undertaken to date does highlight that the existing junction of the A4/Syon Lane currently operates close to capacity at peak times of demand and as such we can say that the traffic attraction of two large foodstores, one on each development site, is likely to result in significant driver delays and delays to bus services, locally. The effect of this scenario on Driver (and bus) Delay would be long term, permanent and **Major Adverse**.

9.16. Table 9.12 of the ES Chapter identifies that personal injury collision clusters occur on all assessed links, making each link highly sensitive in relation to road safety. Table 2 identifies that for this scenario general traffic would increase by more than 10% on links 8, 9 and 10. For links 1, 2, 3, 4, 5, 6, 7 and 11, the effect of the Development on accidents and safety would be direct, long term, permanent **Negligible Adverse**. For links 8, 9, and 10, the effect of the Development on accidents and safety would be direct, long term, permanent and **Minor Adverse**.

Mitigation Measures

9.17. In accordance with GEART the assessment has identified:

- no discernible or significant environmental effects during the construction phase of the Development;
- no discernible or significant environmental effects upon the severance, pedestrian amenity, pedestrians (and cyclist) delay and fear and intimidation during the operational phase of the Development;
- a minor adverse effect on accidents and safety during the operational phase of the Development; and
- a major adverse effect on driver (and bus) delay during the operational phase of the Development.

9.18. The best practice measures set out in the main body of EIA Chapter 9 would be implemented to support the Development.

Residual Effects

9.19. The mitigation measures set out in the main body of EIA Chapter 9 would act to reduce the effect of construction traffic on severance, driver delay, pedestrian amenity, pedestrian (and cyclist) delay, fear and intimidation and road safety. As a result of these mitigation measures, the effects for the demolition and construction phase is considered to remain negligible.

9.20. The mitigation measures set out in the main body of the chapter to reduce the effect of operational traffic on severance, driver delay, pedestrian amenity, pedestrian (and cyclist) delay, fear and intimidation and road safety would remain.

9.21. Physical improvement measures to improve highway capacity would remain, however based on knowledge of the existing and future operation of the highway network, as assessed in the TA and the main body of the Chapter, it is not anticipated that the mitigation measures would fully mitigate the impact of additional traffic flows. While some effect can be anticipated, it is expected that the highway network would still operate over capacity in the two Tesco store scenario and as such the effect of this scenario on Driver (and bus) Delay would be long term, permanent and **Moderate Adverse**.

9.22. As a result of the mitigation measures outlined in the main body of the Chapter, the effect of the Development on accidents and safety for links 8, 9 and 10 would be direct, long term, permanent and **Negligible Adverse**.

Cumulative Effects

9.23. Table 9.17 as set out in the main body of the Chapter provides an overview of the traffic generation for locally committed development sites. These are sites that have planning permission and which could impact on the operation of the local highway.

Demolition and Construction Phase

9.24. Due to the location of the committed development sites and their low levels of potential traffic generation, it is not anticipated that there would be a significant cumulative effect arising from one or more of these sites should they be operational during the demolition and construction phase of Homebase, Syon Lane.

9.25. The routing strategy for construction traffic associated with the Development, as defined in the Outline CLP (Appendix 5.2), requires all construction traffic movements to arrive and depart from the strategic highway, the A4 Great West Road. No traffic would route to/from the of the A4, via Syon Lane, to and from the south, via Syon Lane or on Northumberland Avenue. The Site would be car free, meaning that all Site staff would be required to access the Site by sustainable modes. It is not, therefore, anticipated that Site related construction traffic would have an adverse cumulative environmental effect on the operation of any adjacent highway.

9.26. The cumulative effect of the Development's demolition and construction phase, and traffic associated with adjacent development sites, is considered to be negligible as increases in HGV movements do not exceed 10% on any receptor links as presented in Table 1.

Completed Development

9.27. As a consequence to of the low car nature of locally permitted development the cumulative effect of the Development and adjacent development sites is considered to be negligible, both before and after the implementation of Development-related mitigation measures.

Summary

9.28. This Appendix to Chapter 9 of the ES has reported on the likely transport and accessibility effects to arise from the demolition and construction and the completed development stages of the Development at the Homebase Site under a scenario whereby the existing Tesco and PFS at the Osterley Tesco Site remains operational (and is not redeveloped).

9.29. This Appendix considers the implications of construction traffic in 2023 (peak construction) and the operational traffic in 2026, which is when the Development should be completed and occupied. Traffic data has therefore been calculated for the following:

- 2023 Baseline: Surveyed traffic flows with background growth;
- 2023 Baseline + Construction traffic: Assumes that the existing Tesco store and PFS remain operational;
- 2026 Baseline: Surveyed traffic flows with background growth; and
- 2026 Baseline + Development traffic: Assumes that the existing Tesco store and PFS remain operational.

9.30. In line with the guidelines within GEART, a screening exercise has been undertaken to establish the potential for an environmental effect on severance, driver delay, pedestrian amenity, pedestrian (and cyclist) delay, fear and intimidation and road safety. The following rules have been applied.

- Rule 1: Include highway links where traffic flows are predicted to increase by more than 30% (or where the number of HGVs is predicted to increase by more than 30%); and
- Rule 2: Include any other specifically sensitive areas where traffic flows (or HGV component) are predicted to increase by 10% or more.

9.31. This assessment has established that the Development would result in an impact below the thresholds of 30% for all links and 10% for links of high sensitivity during the 'demolition and construction' phase of the Development.

9.32. It is concluded that for links 1, 2, 3, 4, 8, 9, 10 and 11 a reduction in traffic flow (including the HGV component) is anticipated and the resulting effect would be direct, medium term, temporary **Negligible Beneficial** for severance, pedestrian and cyclist delay, pedestrian amenity, fear and intimidation and accidents and safety. For links 5, 6 and 7 an increase in the HGV component of the traffic flow means the resulting effect would be direct, medium term, temporary **Negligible Adverse** for severance, pedestrian and cyclist delay, pedestrian amenity, fear and intimidation and accidents and safety.

9.33. While the effect of demolition and construction are negligible, a Detailed Construction and Logistics Plan would be implemented (secured by planning condition) to minimise the effects of this phase of Development.

9.34. The operational mitigation measures would include the physical highway infrastructure embedded mitigation works at the Gillette Corner junction to accommodate Tesco traffic turning from the A4 Great West Road south into Syon Lane. There would also be the implementation of commercial and residential Travel Plans for the operational Development and a Delivery and Servicing Plan.

9.35. The effect of the 'operational' Development on severance, pedestrian and cyclist delay, pedestrian amenity, fear and intimidation would be direct, long term, permanent and **Negligible Adverse**.

9.36. It is expected that the highway network would operate over capacity in the two Tesco store scenario and despite mitigation the effect of this scenario on Driver (and bus) Delay would be long term, permanent and **Moderate Adverse**.

9.37. As a result of the mitigation measures outlined in the Chapter, the effect of the Development on accidents and safety would be direct, long term, permanent and **Negligible Adverse**.

9.38. Local committed development sites have been identified as being 'low car' or 'car free' developments and as such the cumulative effect of the Development and committed development sites is considered to be negligible for both the demolition and construction and operational phases.

9.39. Table 3 contains a summary of the likely effects of the Development under the specific development scenario.

Table 9.3A: Table of Significance – Transport and Access

Potential Effect	**Nature of Effect** (Permanent/ Temporary)	**Significance** (Major/Moderate/Minor)(Beneficial/Adverse/Negligible)	**Mitigation / Enhancement Measures**	**Geographical Importance***							**Residual Effects** (Major/Moderate/Minor) (Beneficial/Adverse/Negligible)
				I	UK	E	R	C	B	L	
Demolition and Construction											
Severance	Temporary	Negligible Beneficial	Implementation of CLP.							X	Negligible Beneficial
Pedestrian Amenity	Temporary	Negligible Beneficial								X	Negligible Beneficial
Fear and Intimidation	Temporary	Negligible Beneficial								X	Negligible Beneficial
Pedestrian (and cyclist) Delay	Temporary	Negligible Beneficial								X	Negligible Beneficial
Road Safety	Temporary	Negligible Beneficial								X	Negligible Beneficial
Driver (and bus) Delay	Temporary	Negligible Beneficial								X	Negligible Beneficial
Operational Development											
Severance	Permanent	Negligible Adverse	Implementation of Commercial and Residential Travel Plans, and Delivery and Servicing Plan.							X	Negligible Adverse
Pedestrian Amenity	Permanent	Negligible Adverse								X	Negligible Adverse
Fear and Intimidation	Permanent	Negligible Adverse								X	Negligible Adverse
Pedestrian (and cyclist) Delay	Permanent	Negligible Adverse								X	Negligible Adverse
Road Safety	Permanent	Minor Adverse								X	Negligible Adverse
Driver (and bus) Delay	Permanent	Major Adverse	Highway capacity improvement measures to be secured by legal agreement							X	Moderate Adverse
Cumulative Effects											
Construction	Temporary	Negligible Beneficial	Implementation of CLP, including vehicle routing strategy.						X		Negligible Beneficial
Operation	Permanent	Negligible Adverse	Implementation of Commercial and residential Travel Plans						X		Negligible Adverse

*** Geographical Level of Importance**

I = International; UK = United Kingdom; E = England; R = Regional; C = County; B = Borough; L = Local