

Redrow Homes Limited

265 Burlington Road, New Malden

Rebuttal - Proof of Evidence Mike
Savage

Final | 24 November 2020

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 247852-00

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1 Proof of Evidence Richard Lancaster

1.1 Introduction

- 1.1.1 I have reviewed the evidence of Richard Lancaster and would like to draw out the following comments in response.

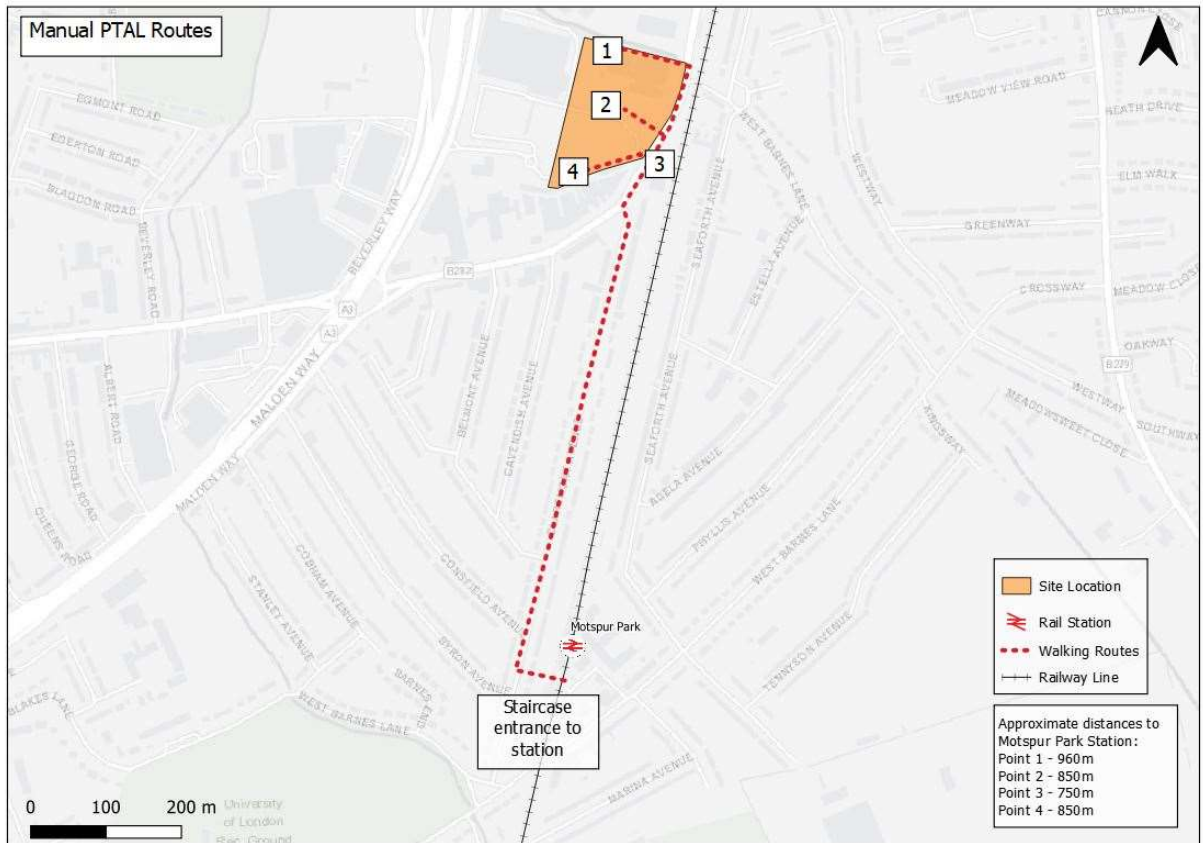
1.2 PTAL

- 1.2.1 Section 6.38 of the Statement of Common Ground (SOCG) with the Council 13th bullet states '*The site has good access by walking, cycling, and public transport, having four frequent bus routes that serve the site and access to a number of rail stations. The site has a PTAL of 3 and access to a range of local facilities*'. The PTAL of the site has been agreed with the Council as PTAL3.
- 1.2.2 From paragraph 6.3 onwards Mr Lancaster explains the PTAL methodology and relies on the information provided within the WebCAT online tool. As I explain in paragraph 2.5.2 of my evidence the online tool is based on a grid and does not always reflect the site-specific accessibility. My evidence refers to a more detailed calculation that in turn identifies a more accurate assessment of accessibility to the site. I had not enclosed the detailed calculations within my evidence as the PTAL for the site had already been agreed and therefore was not (as far as I was aware) in dispute, these calculations are now enclosed at Appendix A to this rebuttal.
- 1.2.3 The PTAL measure takes into account factors such as walk distances to service access points and average waiting time for services as Mr Lancaster explains in paragraphs 6.3 to 6.8. The methodology therefore allows a comparative assessment of one London location to another. As Mr Lancaster rightly identifies in paragraph 6.13 the methodology does not include factors for gradient of local streets or stairs at the station end of the journey.
- 1.2.4 Accessing the platforms to London stations generally involves some change in level to access platforms in one direction or another, and whilst Network Rail and TfL are gradually providing step free access to their stations most still do not have such a facility. The change in level with stairs is therefore not unusual, and neither is a gentle gradient of the surrounding streets (which, in the absence of a topographical

survey, I estimate to be between around 1:50 and 1:300 depending upon which section of street is considered).

- 1.2.5 I do not agree that these factors materially affect the accessibility of this station relative to most other London stations. Whilst it is reprehensible that past decisions did not include design for access to all, that does not mean that where disabled access is not provided that a blanket conclusion should be arrived at that a location is not accessible to the remainder of the population, as Mr Lancaster seems to infer. A significant proportion of Londoners use rail as mode of travel despite many stations not having step free access and there being gradients to streets in London.
- 1.2.6 Appendix B to this rebuttal is a press release from HM Treasury regarding the items in the Spring Spending review relating to London. The 4th bullet explains that there will be *Accessibility improvements at Motspur Park, South Croydon and Tooting railway stations, as part of a wider c. £50 million investment in station accessibility*. Whilst I have not yet been able to obtain the details of the scheme to deliver step free access, it is clear that step free access at Motspur Park will make it even more attractive to residents.
- 1.2.7 Paragraph 6.11 of Mr Lancaster's evidence refers to the distance to Motspur Park station being 950m from the site whereas my evidence paragraph 2.5.4 shows that the distance is actually around 750m, although the distance changes depending upon where in the site the distance is measured (see figure 1 below).

Figure 1 Walk distances to Motspur Park Station



1.2.8 Whilst PTAL does not take into account stations that are over 960m walk distance, Londoners regularly walk much further than this to access a station. Work by transport consultancy WYG using National Travel Survey shows that the 85th percentile walk distance to a station in London is 1290m, and outside London is 1610m (Reference: How far do people walk? Presented at PTRC Transport Practitioners’ Meeting London July 2015 at Appendix C).

1.2.9 The Council have agreed that the site has a PTAL 3 and I do not accept the points made by Mr Lancaster that appear to be designed to resile from this agreed position.

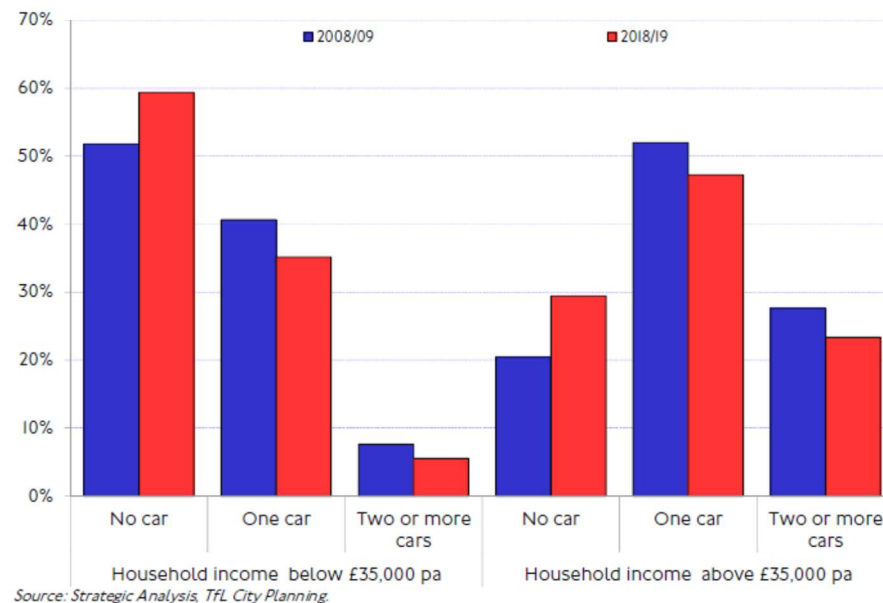
1.3 Development Forecast Car Ownership

- 1.3.1 In Paragraph 6.21 and 6.22 Mr Lancaster states he has analysed the car parking data for West Barnes Ward and he presents his analysis in Appendix 4. From this he suggests that applying this data to 456 dwellings would result in 497 residential vehicles requiring a car parking space.
- 1.3.2 However, Mr Lancaster has failed to acknowledge that within the West Barnes Ward housing stock 82% of dwellings are houses (as opposed to flats) and that the household size, affluence and car ownership would therefore be greater than for a flatted development (see data in Appendix D). He applies a ratio of more than one vehicle per dwelling (1.09 based on Mr Lancaster's figures 497/456).
- 1.3.3 Also 93% of dwellings in West Barnes Ward are private tenure compared to the proposed development with 68.6% private dwellings. Of the West Barnes dwellings 76% are owner occupied whereas for flatted development we would expect this to be some 44% based on flatted dwellings in the area. Put simply, this data is not properly comparable or applicable to the proposed development, and the conclusions derived from it are erroneous.
- 1.3.4 The car ownership for flats is well below that for houses, indeed car ownership for flats fell between 2001 Census and 2011 Census. Furthermore, the 2011 data is now almost 10 years out of date, and the attitude towards car use has changed, especially in London, over that time. There has been a significant increase in awareness of climate change, many councils have declared a climate emergency (including LB Merton see Appendix E) with continued awareness of air quality issues. Transport for London and the Government are promoting active travel and encouraging people to make the right choices when considering their mode of travel. Not all will heed this advice, but many do.
- 1.3.5 LBM's Draft Climate Change Strategy and Action Plan identifies that residents must stop using petrol and diesel cars, reduce car use in favour

of walking cycling and public transport, consider whether it is necessary to own a car, working together to reduce car use.

- 1.3.6 The Travel in London Report 12 Figure 4.24 shows that households with no car have increased and households with either one car or two plus cars have both reduced. This is further evidence of this downward trend.

Figure 4.24 Proportion of households by car ownership and household income, LTDS 2008/09-2018/19.



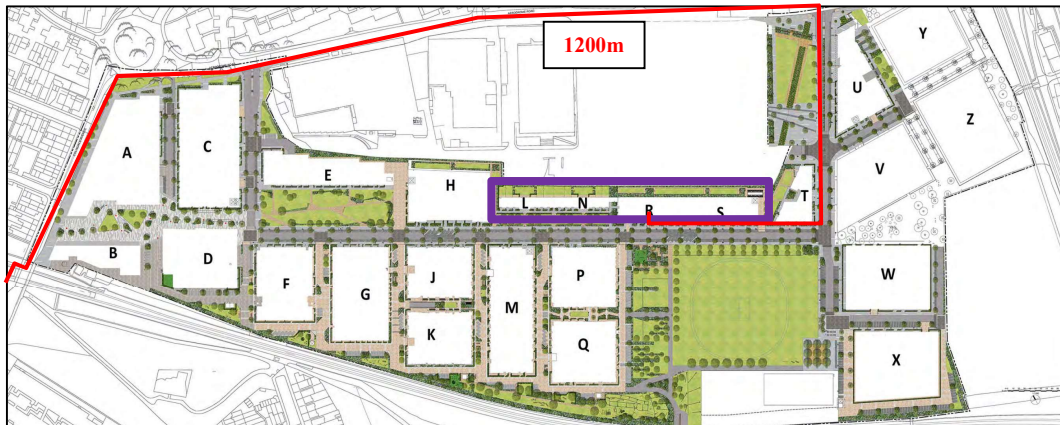
- 1.3.7 Car ownership for flatted development based on 2011 Census data for the local Ward would be substantially below the level Mr Lancaster quotes even in an unconstrained scenario where residents can park off street or on street outside of their dwelling.
- 1.3.8 If one relies on the 2011 Census car ownership data selecting Census Output Areas that are mainly flats, the average flatted development car parking ratio for Merton is 0.62 vehicles per dwelling (see Appendix D). However, in my judgement this level of demand would not be realised, for the reasons given above, and the explanations I provide below.
- 1.3.9 If residents could not park within an accessible distance from their dwelling their propensity to own a car is likely to be substantially reduced (over and above the underlying trend noted above). So, if a resident of the proposed development could not secure an on-site

parking permit then the likelihood they would park elsewhere on street would be much less.

- 1.3.10 I have access to survey data at a number of residential sites across London. A lot of this survey data is unfortunately confidential and the property of our clients and therefore I am not able to share at this Inquiry. So whilst I appreciate this is not open to scrutiny, my professional judgement is clearly informed by access to this in depth research.
- 1.3.11 Had the Council requested evidence to understand whether the level of car ownership on the site would exceed supply we could have commissioned surveys to demonstrate that the level of provision is appropriate. Unfortunately, Mr Lancaster has chosen to raise this issue only within his proof of evidence.
- 1.3.12 One programme of surveys for a client across a number of residential developments has shown that actual car parking demand has been much lower than forecast using Census data for flatted development. For sites with a similar PTAL the actual demand was around 40-60% of the demand forecasted using Census for flats and in absolute terms had a ratio of less than 0.48 cars per household. If these factors are applied to the 0.62 figure above, this equates to an expected parking ratio of 0.25-0.37 vehicles per dwelling for the proposed site.
- 1.3.13 We have also undertaken surveys on behalf of our client Redrow at Colindale Gardens in London Borough of Barnet (see Appendix F). A survey of blocks L, N R and S (see Figure 2 below) comprising 181 dwellings returned a demand of 48 vehicles which equates to a ratio of 0.27 spaces per dwelling. This is well below (43.5%) the forecast level of provision using Census car ownership data which estimated a ratio of 0.62 spaces per dwelling on average. The PTAL of this site at the time of the survey was PTAL1b as residents had to walk north east to Aerodrome Road before walking west to Colindale underground station some 1200 m away (tube station located west of Block B and walk

route/distance in red). The area between the blocks and the site was inaccessible and subject to demolition and construction works.

Figure 2 Plan of Colindale Gardens plot labels



1.3.14 It is also worth mentioning parking survey data from two other, more accessible (PTAL 6a) sites,

- A site in Greenwich where a survey of some 750 dwellings resulted in a parking ratio of 0.17 vehicles per dwelling. Census data for this Borough would suggest an average car ownership of 0.49 spaces per dwelling. Therefore, the actual parking demand was some 35% of the 2011 Census level.
- Another site in Hackney some 780 dwellings were surveyed with a parking demand of 0.16 vehicles per dwelling. The Census data for this Borough would suggest an average car ownership of 0.34 vehicles per dwelling. Therefore the actual parking demand was 47% of the 2011 Census level.
- Both of these sites demonstrate that the 40-60% expected reduction compared to 2011 Census appears a reasonable approach

1.3.15 The evidence above is consistent with the TA at paragraph 5.3.6 which states that the proposed parking is intended to be able to cater for the demand associated with residents from the new homes. The level of parking had (as reported in TA 2.3.1) been subject of detailed discussions with officers of LBM and TfL. In my experience and based on the survey information I have available I expect the parking demand

for the proposed development would be readily contained within the site.

1.4 Car Parking Surveys

- 1.4.1 In paragraph 6.24 Mr Lancaster refers to the parking survey undertaken for the TA and suggests that ‘a flaw in the data’ is likely to have resulted in a misinterpretation of the evidence by the Local Authority. In paragraph 6.26 Mr Lancaster suggests that restricted and unrestricted parking stress levels should have been presented, because (he states in paragraph 6.27) it would not be possible for residents associated with the proposed development to utilise Cavendish Avenue for residential parking. He makes the same point about West Barnes Lane.
- 1.4.2 The Lambeth Parking Survey guidelines state that a common sense approach should be taken when considering the Extent of Survey (last paragraph under that heading). The extent of the survey and the presentation of the results were discussed and agreed with officers, who would have been aware of the restrictions that existed in the area. LBM officers will have been aware that the Cavendish CPZ was implemented to tackle residents’ concerns over daytime parking from local businesses and commuters taking advantage of this accessible location to utilise Motspur Park station. As a result, the hours of operation at 10am to 4pm to tackle daytime issues, not apply night-time restrictions.
- 1.4.3 The maximum demand is surveyed in the early hours of the morning when maximum residential parking stress occurs. Spaces on Cavendish Avenue would therefore be available for local residents with a good deal of flexibility in the morning and evening peak periods and contribute to the overall level of parking available at night in the vicinity of the development. In my judgement, and applying common sense, this street should be included in the survey results as I have done in Tables 5 and 6 of my evidence.
- 1.4.4 In paragraph 6.31 Mr Lancaster presents the overnight TA parking stress but states that the unrestricted demand was not provided within the TA. Notwithstanding my position above, in Table 2 below I have set out the original and recent survey results for the unrestricted streets so this information is available to the Inquiry. It should be noted that there are differences in the extent of streets surveyed as explained in my evidence and may also have been some small changes to cross overs

restricting on street parking but presumably increasing off street parking.

Table 2 Parking demand Comparison

Survey	Day 1			Day 2			Average		
	CAP	TOT	%OCC	CAP	TOT	%OCC	CAP	TOT	%OCC
Motts*	356	298	83.7%	356	285	80.1%	356	292	81.9%
PWLC Survey	331	304	91.8%	331	296	89.4%	331	300	90.6%
Difference	-25	+6	+8.1%	-25	+11	+9.4%	-25	+8.5	+8.8%

**Burlington Road data removed to be comparable with PWLC survey*

- 1.4.5 From the above table even if only the unrestricted car parking stress is considered from the pre Covid survey the levels would still be 83.7% and 80.1% well below the 90% threshold which would warrant consideration of the introduction of a CPZ. It is not surprising that parking demand during the global Covid pandemic would be greater as residents would not be able to travel in the same way and their vehicles would therefore be at home. These are not, we hope, typical conditions.
- 1.4.6 Mr Lancaster speculates based on erroneous assessment of car parking demand from the development that this will result in vehicles driving around the surrounding area in search of a parking space and then drivers being tempted to park in an unsafe location. He further speculates where those vehicles may park but has not provided any evidence about how this will impact road safety.
- 1.4.7 I do not accept that demand will exceed supply on site, and my client has made a commitment to fund a CPZ scheme that would offer a failsafe method to overcome the concerns of residents that parking may be put under stress. Mr Lancaster's concerns in reality go to no more than whether this part of the planning obligation is necessary.
- 1.4.8 As I have referred to in my evidence (para 4.2.12 for example) Policy T6 Part C specifically states that the absence of on street parking controls should not be a barrier to new development. It places a clear

obligation on the part of the Borough to implement these controls wherever necessary.

1.4.9 The Borough have stated in the committee report and reiterated in section 6.38 of the SOCG that

- 4th bullet – the level of proposed car parking accords with the maximum residential parking standards in both the current and draft London Plan
- 5th bullet – the Council’s Transport Planner agreed that the parking survey submitted with the application show that parking demand on surrounding streets is operating below capacity and that there is spare on street capacity available near the site
- 12th bullet – there would be no adverse road safety implications
- 15th bullet – prior to the committee officers advised that the introduction of a CPZ was not required due to the availability of car parking in the area and acknowledged that the applicant has offered to fund the CPZ

1.4.10 LBM officers in reaching a conclusion about the availability of car parking on the surrounding streets will have assessed capacity knowing that Cavendish Avenue was subject to car parking controls. When officers assessed the risk of whether car parking demand would be contained on site or whether there would be overspill, they presumably considered this risk to be minimal or non-existent otherwise officers would have challenged the applicant to demonstrate that this was the case and taken a different stance at committee and in the SOCG. I am not aware of any such request.

1.4.11 Mr Lancaster refers in paragraph 6.38 that the Albany Lodge flatted residential scheme with a parking ratio of 0.61 would result in further overspill but he has not presented evidence of flatted development parking demand to qualify that. This scheme was permitted by the Council in 2016 at a level of provision much lower than Mr Lancaster suggests should be provided. In my judgement based on data available to me the parking levels are expected to be well below this level.

1.4.12 With reference to Paragraph 6.49 Mr Lancaster suggests that the implementation of a CPZ scheme would reduce the available parking but provides no evidence about what level of change would result or whether the remaining spaces would provide sufficient parking for existing demand levels. Even if a few spaces are lost there is a good amount of night time capacity and once a CPZ is implemented it would

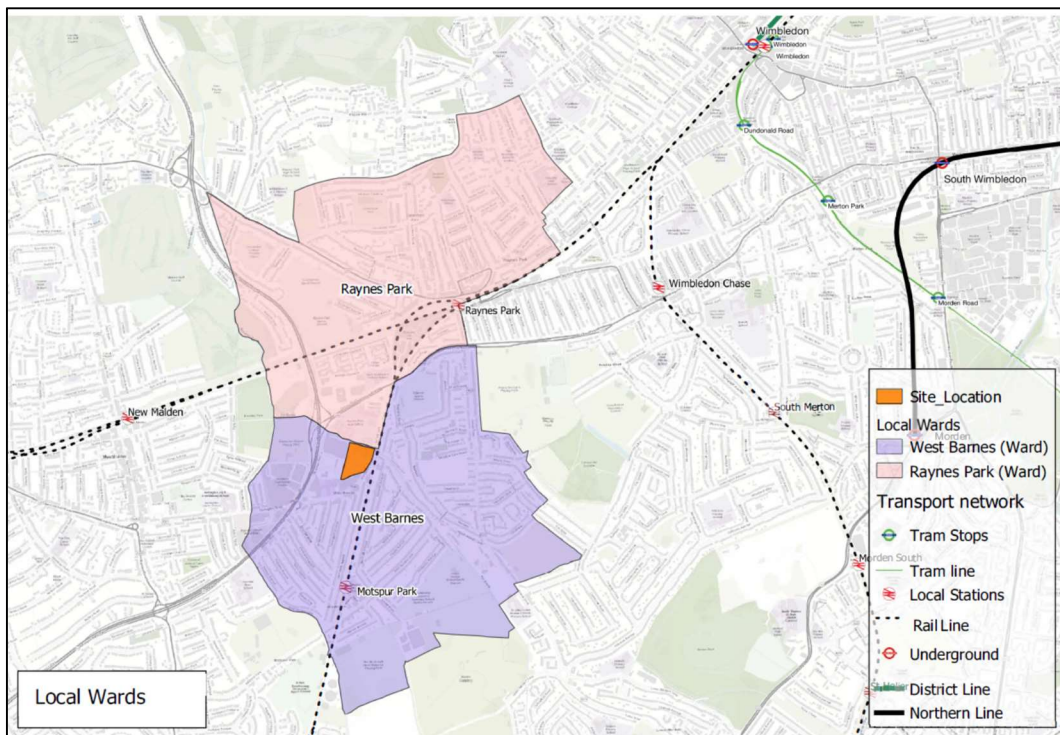
then effectively be a ‘closed circuit’ with no external demand pressures and an acceptable level of provision/stress would prevail.

1.4.13 With regard to paragraph 6.51 there is no evidence that parking demand would be pushed beyond the distances recommended within the Lambeth method. This would represent a very poor level of service to residents and in my judgement an extremely unlikely scenario.

1.5 Travel Demand for Proposed Development

1.5.1 Mr Lancaster refers in paragraph 6.62 to a difference between the utilised Census mode shares in the TA and the local West Barnes Ward proportions. The site sits on the boundary between the West Barnes Ward and Raynes Park Ward (see Figure 3) and there are small differences between the mode share proportions between two wards. The proportions utilised for the TA were for the adjacent Raynes Park Ward which was considered as appropriate for the TA assessment, within which 50% of dwellings are flats, whereas flats form only 18% of dwellings in West Barnes Ward. Column 4 of Mr Lancaster’s Table 1 is therefore Raynes Park Ward Census data.

Figure 3 – Ward Boundaries



- 1.5.2 In my evidence (Section 6) I have utilised a different and more accurate approach to determining travel demand and mode share for the proposed development which relates to all journey purposes not just the journey to work. The Council have agreed in the SOCG 6.38 14th bullet that Residents would have a variety of journey purposes in the peak hours including travel for work, education, education escort, retail, leisure and personal business. Purposes other than work will have different and often more active modes of travel as the distances for these purposes tend to be shorter.
- 1.5.3 Contrary to paragraph 6.64 of Mr Lancaster's evidence the actual level of traffic impact will therefore be less than the level of performance referred to in the Transport Assessment as I conclude in paragraph 6.2.9 of my evidence.
- 1.5.4 In paragraph 6.68 Mr Lancaster suggests that 'the same issues;' (he suggests increased traffic compared to the TA) would apply to the junction of Burlington Avenue and West Barnes Lane, however he presents no evidence to support this. Table 18 of my evidence shows that the net change in traffic on West Barnes Lane north and east is negative in both the TA and my assessment and based on this evidence therefore his claim is unfounded.
- 1.5.5 It should also be noted that my evidence in Table 18 shows the net change in vehicles including Car, Taxi, Motorcycles and service vehicles. So contrary to Mr Lancaster's evidence paragraph 6.65 the net change in flows in the TA have not been underestimated by 'at least' 5.3% but overestimated quite considerably because the variety of journey purposes (recognised by the Council in the SOCG) had not been taken into account in the TA. My paragraph 6.2.9 identifies that 'The revised forecast (net change in vehicle trips) is half that considered in the Transport Assessment for the AM forecast and one quarter of the PM forecast.'
- 1.5.6 The SOCG 6.38 10th bullet states that a safety audit has been undertaken and the form of access considered acceptable. Despite this agreed position a new RSA was commissioned by Mr Lancaster for LBM, which I have reviewed and consider acceptable. Mr Lancaster also agrees in his paragraph 6.70 that there are no significant issues with RSA.

2 Raynes Park and West Barnes Residents Association

- 2.1.1 I have identified in my evidence and above that Motspur Park is well within walking distance and that it is likely some residents would also use Raynes Park station contrary to paragraph 5.1 of RPWBA proof of evidence. I have agreed with the Council and explained that the site has a PTAL of 3. The site has good access to public transport and local facilities and therefore can support the density of development proposed.
- 2.1.2 The development will add trips to the local network, and these have been assessed and found to be acceptable by officers who recommended the scheme for approval. I have demonstrated in my evidence that the net change in traffic flow had been overestimated and therefore the level of impact would be less than officers agreed or that Councillors had considered.
- 2.1.3 Contrary to the points made in paragraph 5.4 the existing access has been used for entry and exit for the original office development as well as eastbound exit for Tesco's shoppers. I have assessed the transport implications of the Proposed Development and in my judgement the proposed development accords with national regional and local policy.

3 Conclusion

- 3.1.1 I have considered the evidence of Mr Lancaster and the Raynes Park and West Barnes Residents Association, but this does not cause me to alter the conclusions I have reached in Section 8 of my evidence.

Redrow Homes Limited

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Figures and Appendices to Rebuttal
of Mike Savage

Final | 24 November 2020

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Appendix B – Spring 2020 Budget

Appendix C – WYG How Far Do People Walk

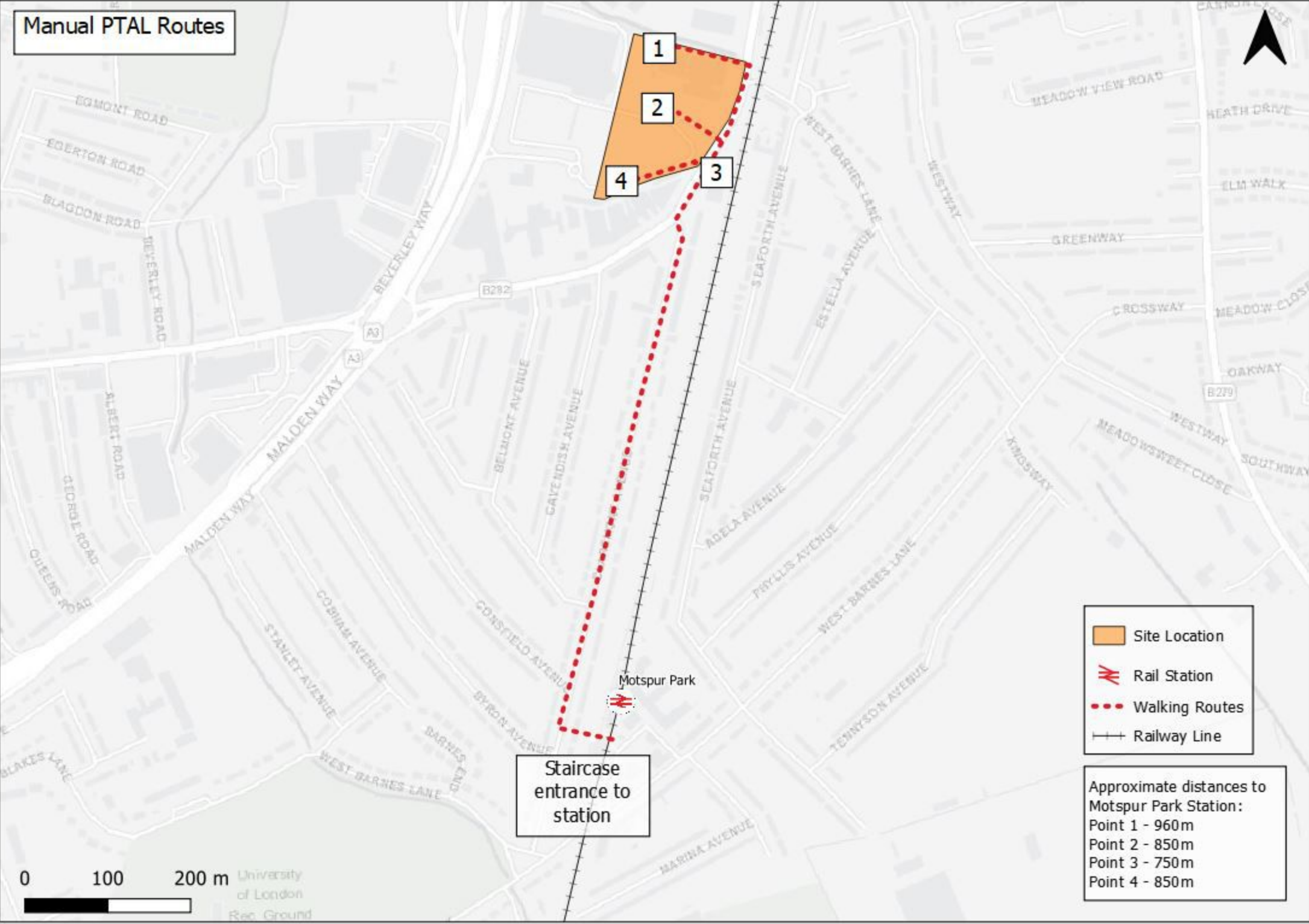
Appendix D – Census House and Flat Data

Appendix E – Draft Climate Strategy and Action Plan

Appendix F - Colindale Gardens Blocks B and G

Figure 1 PTAL Walking Routes

Manual PTAL Routes

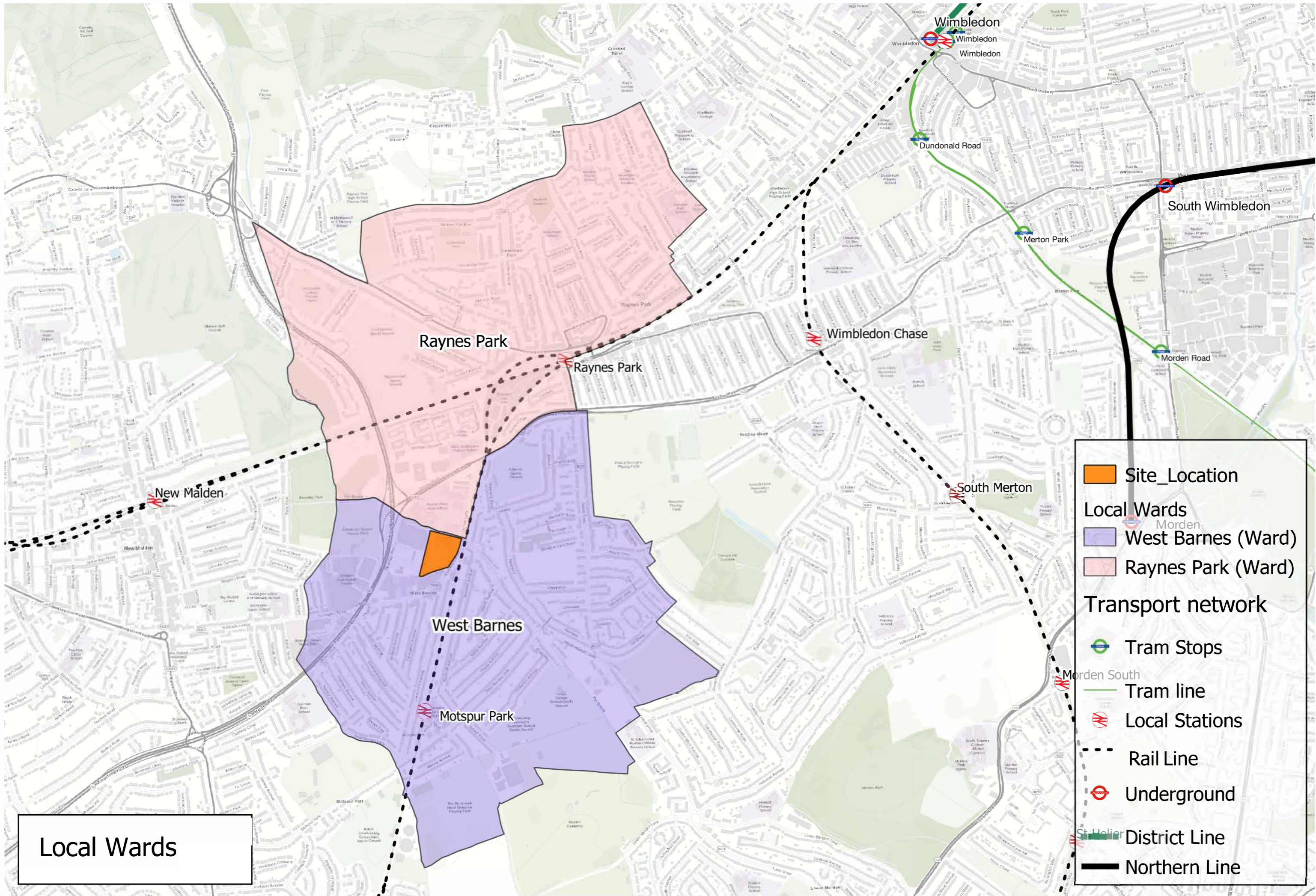


Staircase
entrance to
station

-  Site Location
-  Rail Station
-  Walking Routes
-  Railway Line

Approximate distances to
Motspur Park Station:
Point 1 - 960m
Point 2 - 850m
Point 3 - 750m
Point 4 - 850m

Figure 3 Local Wards Map



Local Wards

Site_Location
Local Wards
 West Barnes (Ward)
 Raynes Park (Ward)
Transport network
 Tram Stops
 Tram line
 Local Stations
 Rail Line
 Underground
 District Line
 Northern Line

Appendix A - PTAL Calculations

Calculation Parameters

 Day of Week: M-F
 Time Period: AM Peak
 Walk Speed: 4.8 kph
 Bus Node Max Walk Access Time (mins): 8
 Bus Reliability Factor: 2.0
 LU Station Max Walk Access Time (mins): 12
 LU Reliability Factor: 0.75
 National Rail Station Max Walk Access Time (mins): 12
 National Rail Reliability Factor: 0.75

Rebuttal TEST LOCATION 1

Mode	Stop	Route	Distance	Frequen	Walk	Tir	SWT (mi	TAT (mi	EDF	Weight	AI
Bus	WEST BARNES LN CROSSING	131	250	7.5	3.125	6	9.125	3.2877		1	3.2877
Bus	NEW MALDEN TESCO'S	265	260	5	3.25	8	11.25	2.6667		0.5	1.3333
Bus	NEW MALDEN TESCO'S	152	260	5	3.25	8	11.25	2.6667		0.5	1.3333
Bus	WEST BARNES LN CROSSING	K5	250	1	3.125	32	35.125	0.8541		0.5	0.427
Rail	Motspur Park	'WATRLI	960	2	12	15.75	27.75	1.0811		1	1.0811
Rail	Motspur Park	'DORKIN	960	1	12	30.75	42.75	0.7018		0.5	0.3509
Rail	Motspur Park	'WATRLI	960	0.33	12	91.659	103.66	0.2894		0.5	0.1447
Rail	Motspur Park	'GUILDFI	960	1.33	12	23.306	35.306	0.8497		0.5	0.4249
Rail	Motspur Park	'WATRLI	960	1.67	12	18.714	30.714	0.9768		0.5	0.4884
Rail	Motspur Park	'EFNGHI	960	0.67	12	45.526	57.526	0.5215		0.5	0.2608
Rail	Motspur Park	'EPSM-V	960	1	12	30.75	42.75	0.7018		0.5	0.3509
Rail	Motspur Park	'WATRLI	960	2	12	15.75	27.75	1.0811		0.5	0.5405
Rail	Motspur Park	'CHSSS-\	960	2	12	15.75	27.75	1.0811		0.5	0.5405

Total PTAL: 10.6

PTAL 3

Rebuttal TEST LOCATION 2

Mode	Stop	Route	Distance	Frequen	Walk	Tir	SWT (mi	TAT (mi	EDF	Weight	AI
Bus	WEST BARNES LN CROSSING	131	125	7.5	1.5625	6	7.5625	3.9669		1	3.9669
Bus	NEW MALDEN TESCO'S	265	250	5	3.125	8	11.125	2.6966		0.5	1.3483
Bus	NEW MALDEN TESCO'S	152	250	5	3.125	8	11.125	2.6966		0.5	1.3483
Bus	WEST BARNES LN CROSSING	K5	125	1	1.5625	32	33.563	0.8939		0.5	0.4469
Rail	Motspur Park	'WATRLI	850	2	10.625	15.75	26.375	1.1374		1	1.1374
Rail	Motspur Park	'DORKIN	850	1	10.625	30.75	41.375	0.7251		0.5	0.3625
Rail	Motspur Park	'WATRLI	850	0.33	10.625	91.659	102.28	0.2933		0.5	0.1467
Rail	Motspur Park	'GUILDFI	850	1.33	10.625	23.306	33.931	0.8841		0.5	0.4421
Rail	Motspur Park	'WATRLI	850	1.67	10.625	18.714	29.339	1.0225		0.5	0.5113
Rail	Motspur Park	'EFNGHI	850	0.67	10.625	45.526	56.151	0.5343		0.5	0.2671
Rail	Motspur Park	'EPSM-V	850	1	10.625	30.75	41.375	0.7251		0.5	0.3625
Rail	Motspur Park	'WATRLI	850	2	10.625	15.75	26.375	1.1374		0.5	0.5687
Rail	Motspur Park	'CHSSS-\	850	2	10.625	15.75	26.375	1.1374		0.5	0.5687

Total PTAL: 11.5

PTAL 3

Rebuttal TEST LOCATION 3

Mode	Stop	Route	Distance	Frequen	Walk	Tir	SWT (mi	TAT (mi	EDF	Weight	AI
Bus	WEST BARNES LN CROSSING	131	110	7.5	1.375	6	7.375	4.0678		1	4.0678
Bus	NEW MALDEN TESCO'S	265	350	5	4.375	8	12.375	2.4242		0.5	1.2121
Bus	NEW MALDEN TESCO'S	152	350	5	4.375	8	12.375	2.4242		0.5	1.2121
Bus	WEST BARNES LN CROSSING	K5	110	1	1.375	32	33.375	0.8989		0.5	0.4494
Rail	Motspur Park	'WATRLI	750	2	9.375	15.75	25.125	1.194		1	1.194
Rail	Motspur Park	'DORKIN	750	1	9.375	30.75	40.125	0.7477		0.5	0.3738
Rail	Motspur Park	'WATRLI	750	0.33	9.375	91.659	101.03	0.2969		0.5	0.1485
Rail	Motspur Park	'GUILDFI	750	1.33	9.375	23.306	32.681	0.918		0.5	0.459
Rail	Motspur Park	'WATRLI	750	1.67	9.375	18.714	28.089	1.068		0.5	0.534
Rail	Motspur Park	'EFNGHI	750	0.67	9.375	45.526	54.901	0.5464		0.5	0.2732
Rail	Motspur Park	'EPSM-V	750	1	9.375	30.75	40.125	0.7477		0.5	0.3738
Rail	Motspur Park	'WATRLI	750	2	9.375	15.75	25.125	1.194		0.5	0.597
Rail	Motspur Park	'CHSSS-\	750	2	9.375	15.75	25.125	1.194		0.5	0.597

Total PTAL: 11.5

PTAL 3

Rebuttal TEST LOCATION 4

Mode	Stop	Route	Distance	Frequen	Walk	Tir	SWT (mi	TAT (mi	EDF	Weight	AI
Bus	WEST BARNES LN CROSSING	131	220	7.5	2.75	6	8.75	3.4286		1	3.4286
Bus	NEW MALDEN TESCO'S	265	260	5	3.25	8	11.25	2.6667		0.5	1.3333
Bus	NEW MALDEN TESCO'S	152	260	5	3.25	8	11.25	2.6667		0.5	1.3333
Bus	WEST BARNES LN CROSSING	K5	220	1	2.75	32	34.75	0.8633		0.5	0.4317
Rail	Motspur Park	'WATRLI	850	2	10.625	15.75	26.375	1.1374		1	1.1374
Rail	Motspur Park	'DORKIN	850	1	10.625	30.75	41.375	0.7251		0.5	0.3625
Rail	Motspur Park	'WATRLI	850	0.33	10.625	91.659	102.28	0.2933		0.5	0.1467
Rail	Motspur Park	'GUILDFI	850	1.33	10.625	23.306	33.931	0.8841		0.5	0.4421
Rail	Motspur Park	'WATRLI	850	1.67	10.625	18.714	29.339	1.0225		0.5	0.5113
Rail	Motspur Park	'EFNGHI	850	0.67	10.625	45.526	56.151	0.5343		0.5	0.2671
Rail	Motspur Park	'EPSM-V	850	1	10.625	30.75	41.375	0.7251		0.5	0.3625
Rail	Motspur Park	'WATRLI	850	2	10.625	15.75	26.375	1.1374		0.5	0.5687
Rail	Motspur Park	'CHSSS-\	850	2	10.625	15.75	26.375	1.1374		0.5	0.5687

Total PTAL: 10.9

PTAL 3

Appendix B - Spring 2020 Budget



Spring Budget 2020 - London

Today's announcements for London include:

- In London, the increase to the National Living Wage (NLW) this April is expected to benefit around 187,000 people.
- In London, the increase to National Insurance thresholds to £9,500 in 2020-21 will result in a tax cut for 4.6 million people and will lift 157,000 people out of paying Class 1 and Class 4 National Insurance Contributions.
- Developing major local road upgrades, including Kew Bridge, Croydon Flyover and the Hope and Anchor Flyover.
- Accessibility improvements at Motspur Park, South Croydon and Tooting railway stations, as part of a wider **c. £50 million** investment in station accessibility.
- London will benefit from the Lower Thames Crossing, which will increase road capacity across the Thames east of London by 90%.
- London will benefit from a share of the next **£5.2 billion** flood and coastal defence investment programme starting in 2021. These locations will benefit from at least the following levels of funding as a result of this programme: **£2 million** for Woolwich and **£1.4 million** for Dagenham to better protect over 1,000 properties.
- London will benefit from a share of **£2.7 billion** for six major hospital schemes as part of the Health Infrastructure Plan, two of which are in London: Barts Health NHS Trust and Epsom and St Helier University Hospitals NHS Trust.

London will also benefit from its share of:

- **£1.5 billion** over five years to return the entire Further Education college (FEC) estate to a good condition.
- **£643 million** funding for rough sleeping accommodation and substance misuse treatment services across the country.
- **£1 billion** Building Safety Fund for non-ACM cladding on residential buildings above 18 metres. High rise buildings tend to be concentrated in London, as well as Birmingham and Manchester.
- **£100 million** seed funding for 21 schemes from the Health Infrastructure Plan, two of which are in London.
- **Up to £400 million** immediate boost for world-leading research, infrastructure and equipment in 2020-21.

- **Over £500 million** to cement our world-leading position in cutting edge technologies including space, electric vehicles and life sciences. This will support innovation and benefit supply chains and sectors across the whole country, including London.
- At least **£800 million** in a new blue skies research and innovation agency. This ground-breaking institution will provide new funding for high-risk, high-reward science across the UK.
- **£80 million** will be made available over the next five years to support the UK's foremost specialist institutions build on their global influence.
- **£387 million** in 21-22 to continue priority Local Growth Fund projects before decision on the Local Growth Fund are made at the Spending Review. MHCLG will provide further guidance on how the department will work with places to identify relevant projects.

Appendix C - WYG How Far Do People Walk



How far do people walk?

Gareth Wakenshaw BSc (Hons), PGDip, MCIHT WYG Group

Dr Nick Bunn BSc (Hons), MSc, PhD, MCIHT, CMILT WYG Group

Presented at the PTRC Transport Practitioners' Meeting
London, July 2015



Abstract

Walking and, to a lesser extent, cycling are important factors in assessing land allocations in Local Plans and in determining planning applications. Accessibility to public transport, defined in part, as the walking distance to bus stops can have significant financial implications for new developments if bus services need to be provided or diverted to serve the site. The information on walking distances is limited. Planning Policy Guidance 13 Transport, which gave some useful guidance on walking and cycling distances, was withdrawn in 2012. The IHT's Providing for Journeys on Foot and Planning for Public Transport in New Development were both published 15 years ago. In all three documents there is limited evidence to support the advice given. However, there is a clear need that policy and decision taking should be based on the best evidence available.

The National Travel Survey is a large-scale travel diary survey which provides data on a wide range of transport matters, including walking and cycling distances. It has limitations because it relies on self-completion and the distances are those estimated by respondents. However, the data has been consistently collected across the UK since 1988.

We have used the NTS to obtain average and 85th percentile distances for journeys where walking is the main mode of travel, and also where walking is the first stage of a public transport trip, i.e., walking distance to a bus stop or railway station. When assessing the accessibility of a new development on foot we suggest that the 85th percentile distance should be used to estimate the distance upto which people are prepared to walk. For new bus stops and railway stations, we suggest that the average walking distance is used for planning purposes. The contribution which the walking distance to a bus stop, or railway station, plays in the perceived convenience of public transport is not well understood and is an area for further study. Until further information is available, the use of average walking distance from the NTS is at least based on the distance that people actually walk.

We have looked at the influence of region, whether the area is urban or rural, journey purpose and gender on walking as the main mode and on walking to a bus stop or railway station.

We conclude that the following distances should be used for planning purposes:

	Mean (m)	85 th Percentile (m)
Walk – As main mode of travel		
UK (Excluding London)	1,150	1,950
London	1,000	1,600
Walk to a Bus Stop		
UK (Excluding London)	580	800
London	490	800
Walk to a Railway Station		
UK (Excluding London)	1,010	1,610
London	740	1,290

Appendix D - Census House and Flat Data

D1 - 80% Flats

D2 - 80% House

D3 - House and Flats

Zone of London	Number of COAs >80% flats	Total Number of COAs in Zone	% of COAs >80% flat	Total Cars/Vans	Total Households	Car/HHD	Total 0 Car HHD	No Car Household (%)	Total 2+ Cars	2+ Cars Households (%)	Total Population	Population per Household
Central	3057	4750	64.4	164316	410128	0.40	270804	66.0	20106	4.9	879058	2.14
Inner	5,228	10,304	50.7	288148	701676	0.41	455572	64.9	34415	4.9	1542904	2.20
Outer	1,832	14,749	12.4	147524	247037	0.60	124584	50.4	21004	8.5	531304	2.15
London	7060	25053	28.2	435672	948713	0.46	580156	61.2	55419	5.8	2074208	2.19

**Census Output Areas (COAs)
>80% flats**

London Borough	Inner Outer	Central London	Number of COAs >80% flats	Total Number of COAs in Borough	% of COAs >80% flat	Total Number of Cars/Vans	Total Households	COAS >80% flat Car/HHD	Total 0 Car HHD	COAS >80% flat No Car Household (%)	Total 2+ Cars	2+ Cars Households (%)	Total Population	COAS >80% flat Population per Household
Camden	Inner	Central	546	749	72.9	28511	72210	0.39	47933	66.4	3516	4.9	159689	2.21
City of London	Inner	Central	30	31	96.8	1609	4263	0.38	2984	70.0	229	5.4	7157	1.68
Islington	Inner	Central	437	697	62.7	20758	59331	0.35	41219	69.5	2185	3.7	128762	2.17
Kensington and Chelsea	Inner	Central	440	631	69.7	26393	56382	0.47	34707	61.6	3711	6.6	108248	1.92
Lambeth	Inner	Central	453	966	46.9	24049	61926	0.39	41161	66.5	2675	4.3	138347	2.23
Southwark	Inner	Central	493	893	55.2	26090	66450	0.39	43867	66.0	2860	4.3	154812	2.33
Westminster	Inner	Central	658	783	84.0	36906	89566	0.41	58933	65.8	4930	5.5	182043	2.03
Hackney	Inner		425	749	56.7	19762	57874	0.34	40533	70.0	1951	3.4	132241	2.28
Hammersmith and Fulham	Inner		294	625	47.0	15742	38347	0.41	24736	64.5	1805	4.7	81355	2.12
Haringey	Inner		181	753	24.0	11574	24631	0.47	14715	59.7	1412	5.7	54387	2.21
Lewisham	Inner		210	887	23.7	12375	27757	0.45	17099	61.6	1483	5.3	60229	2.17
Newham	Inner		130	810	16.0	7188	16290	0.44	10039	61.6	797	4.9	39378	2.42
Tower Hamlets	Inner		559	748	74.7	30463	75979	0.40	49465	65.1	3339	4.4	186539	2.46
Wandsworth	Inner		372	982	37.9	26728	50670	0.53	28181	55.6	3522	7.0	109717	2.17
Barking and Dagenham	Outer		74	553	13.4	4424	9439	0.47	5645	59.8	548	5.8	23485	2.49
Barnet	Outer		154	1036	14.9	14003	20827	0.67	9469	45.5	2251	10.8	47133	2.26
Bexley	Outer		47	728	6.5	3792	6169	0.61	3016	48.9	561	9.1	12054	1.95
Brent	Outer		186	829	22.4	12709	27162	0.47	16332	60.1	1575	5.8	61667	2.27
Bromley	Outer		101	1020	9.9	9182	13612	0.67	6067	44.6	1391	10.2	24798	1.82
Croydon	Outer		125	1132	11.0	9970	17885	0.56	9385	52.5	1236	6.9	35838	2.00
Ealing	Outer		156	956	16.3	12762	21484	0.59	11015	51.3	1855	8.6	49939	2.32
Enfield	Outer		119	905	13.1	9154	15907	0.58	8355	52.5	1327	8.3	35708	2.24
Greenwich	Outer		166	809	20.5	10273	21096	0.49	12355	58.6	1189	5.6	47694	2.26
Harrow	Outer		46	642	7.2	4402	6498	0.68	2933	45.1	702	10.8	14284	2.20
Havering	Outer		49	754	6.5	4073	6311	0.65	2986	47.3	620	9.8	11685	1.85
Hillingdon	Outer		34	789	4.3	3344	4657	0.72	2026	43.5	593	12.7	9864	2.12
Hounslow	Outer		105	714	14.7	9731	14980	0.65	6904	46.1	1429	9.5	32402	2.16
Kingston upon Thames	Outer		81	500	16.2	7313	10514	0.70	4484	42.6	1081	10.3	20756	1.97
Merton	Outer		71	643	11.0	5620	9070	0.62	4343	47.9	762	8.4	19059	2.10
Redbridge	Outer		71	776	9.1	5599	9341	0.60	4639	49.7	755	8.1	19534	2.09
Richmond upon Thames	Outer		72	615	11.7	7062	9370	0.75	3619	38.6	1101	11.8	17511	1.87
Sutton	Outer		91	616	14.8	8767	11908	0.74	4821	40.5	1427	12.0	22855	1.92
Waltham Forest	Outer		84	732	11.5	5344	10807	0.49	6190	57.3	601	5.6	25038	2.32

Zone of London	Number of COAs	Total Number of	% of COAs			COAS >80% houses			COAS >80% houses		COAS >80% houses	
	>80% Houses	COAs in Zone	>80% houses	Total Cars/Vans	Total Households	Car/HHD	Total 0 Car HHD	No Car Household (%)	Total Population	Household	Population per Household	
Central	116	4750	2.4	13155	13980	0.94	4429	31.7	37479		2.68	
Inner	678	10304	6.6	71292	82622	0.86	29389	35.6	240014		2.90	
Outer	6160	14749	41.8	990722	768307	1.29	146738	19.1	2177472		2.83	
London	6838	25053	27.3	1062014	850929	1.25	176127	20.7	2417486		2.84	

Census Output Areas (COAs) >80% houses

London Borough	Inner Outer	Central London	Number of COAs	Total Number of	% of COAs	Total Number of	COAS >80% houses		COAS >80% houses No		Total	COAS >80% houses
			>80% houses	of COAs in Borough	>80% houses	Cars/Vans	Total Households	Car/HHD	Total 0 Car HHD	Car Household (%)	Population	Population per Household
Barking and Dagenham	Outer		309	553	55.9	35453	37889	0.94	12472	32.9	105074	2.77
Barnet	Outer		317	1036	30.6	56015	39887	1.40	6427	16.1	116577	2.92
Bexley	Outer		445	728	61.1	74486	55622	1.34	9210	16.6	148791	2.68
Brent	Outer		210	829	25.3	32144	25291	1.27	5371	21.2	85999	3.40
Bromley	Outer		547	1020	53.6	96131	68153	1.41	9762	14.3	175419	2.57
Camden	Inner	Central	4	749	0.5	437	424	1.03	111	26.2	1136	2.68
City of London	Inner	Central	0	31	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Croydon	Outer		511	1132	45.1	79056	62293	1.27	12493	20.1	171728	2.76
Ealing	Outer		276	956	28.9	40385	34164	1.18	7844	23.0	107744	3.15
Enfield	Outer		352	905	38.9	55626	44994	1.24	10164	22.6	129432	2.88
Greenwich	Outer		233	809	28.8	30083	28450	1.06	7746	27.2	78388	2.76
Hackney	Inner		11	749	1.5	879	1218	0.72	485	39.8	3528	2.90
Hammersmith and Fulham	Inner		28	625	4.5	2409	3393	0.71	1498	44.1	9397	2.77
Haringey	Inner		92	753	12.2	9407	11601	0.81	4555	39.3	33962	2.93
Harrow	Outer		327	642	50.9	59295	41541	1.43	5836	14.0	128503	3.09
Havering	Outer		486	754	64.5	84353	61713	1.37	10380	16.8	160116	2.59
Hillingdon	Outer		410	789	52.0	72326	51236	1.41	8164	15.9	149882	2.93
Hounslow	Outer		228	714	31.9	37625	29382	1.28	5899	20.1	89210	3.04
Islington	Inner	Central	3	697	0.4	285	360	0.79	129	35.8	895	2.49
Kensington and Chelsea	Inner	Central	10	631	1.6	1265	1107	1.14	249	22.5	2644	2.39
Kingston upon Thames	Outer		219	500	43.8	37226	27008	1.38	3847	14.2	75209	2.78
Lambeth	Inner	Central	52	966	5.4	5529	6092	0.91	1946	31.9	17121	2.81
Lewisham	Inner		156	887	17.6	18033	19133	0.94	6043	31.6	50628	2.65
Merton	Outer		237	643	36.9	31856	28422	1.12	6443	22.7	79029	2.78
Newham	Inner		176	810	21.7	16139	21447	0.75	8919	41.6	72901	3.40
Redbridge	Outer		376	776	48.5	59435	46412	1.28	8601	18.5	143701	3.10
Richmond upon Thames	Outer		199	615	32.4	31912	25153	1.27	3944	15.7	65384	2.60
Southwark	Inner	Central	33	893	3.7	4261	4199	1.01	1194	28.4	11055	2.63
Sutton	Outer		283	616	45.9	50552	35478	1.42	5094	14.4	96478	2.72
Tower Hamlets	Inner		5	748	0.7	379	570	0.66	263	46.1	1483	2.60
Waltham Forest	Outer		195	732	26.6	26763	25219	1.06	7041	27.9	70808	2.81
Wandsworth	Inner		94	982	9.6	10891	11280	0.97	3197	28.3	30636	2.72
Westminster	Inner	Central	14	783	1.8	1378	1798	0.77	800	44.5	4628	2.57

DC4406EW - Tenure by number of persons per room in household by accommodation type

ONS Crown Copyright Reserved [from Nomis on 23 November 2020]

population	All households
units	Households
date	2011
area type	2011 census merged wards
area name	E36007498 : Raynes Park
persons per room	All categories: Number of persons per room in household

Tenure	All categories: Whole house or		Other: Total
	Accommodation type	bungalow: Total	
All categories: Tenure	4,177	2,110	2,067
Owned or shared ownership: Total	2,590	1,705	885
Social rented: Total	446	103	343
Private rented or living rent free	1,141	302	839

51% 49%

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

Private rented: 'Other private rented or living rent free' includes the groups 'Private rented: Other' and 'Living rent free'.

'Owned: Owned with a mortgage or loan or shared ownership' includes 'Owned: Owned with a mortgage or loan' and 'Shared ownership (part owned and part rented)'.

"Other" includes flats (etc), in a commercial building and mobile/temporary accommodation.

DC4406EW - Tenure by number of persons per room in household by accommodation type

ONS Crown Copyright Reserved [from Nomis on 23 November 2020]

population	All households
units	Households
date	2011
area type	2011 census merged wards
area name	E36007502 : West Barnes
persons per room	All categories: Number of persons per room in household

Tenure	All categories: Whole house or		Other: Total
	Accommodation type	bungalow: Total	
All categories: Tenure	3,615	2,952	663
Owned or shared ownership: Total	2,787	2,504	283
Social rented: Total	187	68	119
Private rented or living rent free	641	380	261

82% 18%

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

Private rented: 'Other private rented or living rent free' includes the groups 'Private rented: Other' and 'Living rent free'.

'Owned: Owned with a mortgage or loan or shared ownership' includes 'Owned: Owned with a mortgage or loan' and 'Shared ownership (part owned and part rented)'.

"Other" includes flats (etc), in a commercial building and mobile/temporary accommodation.

Appendix E - Draft Climate Strategy and Action Plan



MERTON CLIMATE STRATEGY & ACTION PLAN

TRANSPORT

The use of petrol and diesel vehicles in the borough makes up 19%²⁷ of Merton's emissions as a result of the 600 million kilometres driven in Merton each year.²⁸ Cars produce more carbon emissions than all other modes of transport put together. Emissions from buses, heavy goods and light goods vehicles also generate significant emissions. Around 1000 vehicles registered in Merton are ultra-low emission²⁹ (approximately 1.2% of the total number of vehicles), and over 140 charge points have been installed in public spaces.

2050 Vision for Transport:

People will be healthier as a result of more active travel and cleaner air. Walking and cycling will be accessible and be the default choice for most local journeys. Fewer people will own cars and all vehicles will be electric or use other low carbon fuels. Many neighbourhoods and town centres will be car free. Public transport will be clean and provide an excellent and accessible service.



ACTIONS...

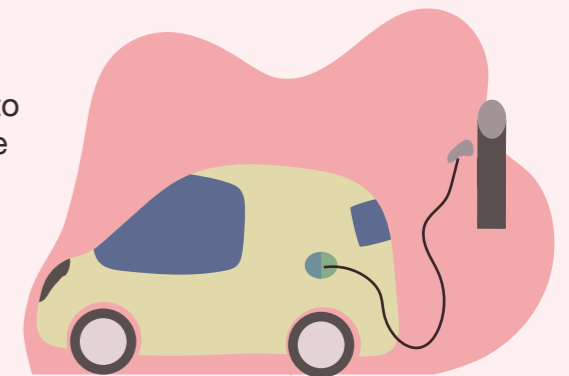
...for residents and communities

There are 77,000 vehicles registered in Merton.³⁰ By 2050, all residents must stop using petrol and diesel vehicles, which on average generate several tonnes of carbon emissions per year.



Individuals should reduce car use in favour of walking, cycling or using public transport, to increase active and sustainable travel from 58% to 73% by 2041.³¹

Residents should consider whether it is necessary to own a car, as vehicle hire becomes more accessible and lower cost. Where private vehicles are necessary, by 2030, all vehicles should be replaced with ultra-low emission alternatives, which are predicted to have similar lifetime costs to fossil fuel cars by 2025.³²



Communities should work together to encourage 20 minutes of active travel a day,³³ and make neighbourhoods more cycle and pedestrian friendly, limiting through-traffic.

Communities should work together to reduce car use and air pollution around schools and densely populated areas,³⁴ as a reduction in air pollution will also reduce carbon emissions.

Appendix F - Colindale Gardens Block B and G

Redrow Homes Ltd

Colindale Gardens Blocks B&G

Detailed Car Parking Management
Plan

May 2019

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number

Ove Arup & Partners Ltd
13 Fitzroy Street
London
W1T 4BQ
United Kingdom
www.arup.com

ARUP

site operatives at a frequency to be set by the Management Company as suitable to avoid abuse.

Enforcement of any breaches of the parking regulations and restrictions will be at the discretion of the Management Organisation. Any enforcement will be compliant with UK law on enforcement of parking on private land.

3.5 Monitoring of Parking in the Development Including use of Electric Vehicle Charging and Disabled Spaces

Surveys of the completed and operational phases of the of the site were undertaken in 2018. These surveys included blocks L, N, R & S. The results of these surveys are presented in Table 3, Table 4, Table 5 and Table 6 for cars, electric charging, blue badge, motorcycles and cycles respectively.

Table 3: Car Parking Surveys

		Number	Rate per Dwelling
Dwellings		181	-
Parking Spaces	Off-Street	49	0.27
	On-Street	63	0.35
	Total	112	0.62
Parked Cars	Off-Street	26	0.14
	On-Street	22	0.12
	Total	48	0.27

Table 4: EV Parking Surveys

		Number	Rate per Dwelling
Dwellings		181	-
Parking Spaces	Off-Street	20	0.11
	On-Street	8	0.04
	Total	28	0.15
Parked Cars*	Off-Street	0	0.00
	On-Street	0	0.00
	Total	0	0.00

* Results show spaces occupied by an electric car on charge

Table 5: Blue Badge Parking Surveys

		Number	Rate per Dwelling
Dwellings		181	-
Parking Spaces	Off-Street	15	0.08
	On-Street	0	0.00
	Total	15	0.08
Parked Cars*	Off-Street	0	0.00
	On-Street	0	0.00
	Total	0	0.00

* Results show spaces occupied by a car displaying a blue badge

Table 6: Motorcycle Parking Surveys

		Number	Rate per Dwelling
Dwellings		181	-
Parking Spaces	Off-Street	8	0.04
	On-Street	0	0.00
	Total	8	0.04
Parked Motorcycles	Off-Street	1	0.01
	On-Street	1	0.01
	Total	2	0.01

Table 7: Cycle Parking Surveys

		Number	Rate per Dwelling
Dwellings		181	-
Parking Spaces	Off-Street	288	1.59
Parked Cycles	Off-Street	28	0.15

These results show a level of car parking demand of 0.27 spaces per dwelling, no measurable use of electric charging or blue badge facilities and 0.01 motorcycles per dwelling. Cycle parking demand is some 0.15 spaces per dwelling.