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8A – 10A HIGH STREET, TEDDINGTON,
TW11 8EW

TRANSPORT STATEMENT

February 2019

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1.0 INTRODUCTION

1.1 Paul Mew Associates is instructed by Aspect Property Services Ltd to prepare a Transport Statement to support a planning application at 8a-10a High Street, Teddington, TW11 8EW.

1.2 The application site's location is presented on a map in Figure 1 of this report; the site's boundary is displayed on an Ordnance Survey (OS) map base in Appendix A.

1.3 The local planning authority is the London Borough of Richmond upon Thames.

1.4 The application site is adjacent to the corner site, located on the A313 High Street, close to the junction with Station Road. The A313 High Street hosts an array of local amenities, such as a local supermarket, hairdressers and restaurants.

1.5 The roads surrounding the site are either unrestricted kerbside or located within a resident only Controlled Parking Zone (CPZ). The site will only be served by Permit Holders Only (PHO) T parking spaces.

1.6 The site has a Public Transport Accessibility Level (PTAL) score of 3 which is a 'moderate' accessibility rating to public transport as defined by Transport for London (TfL). In accordance with the PTAL report produced by TfL, the development site has access to six frequent London bus routes and Teddington railway station.

Proposed Development

1.7 The proposed development will see the two three-bedroom existing maisonettes converted into five self-contained flats inclusive of a previously consented loft extension (planning reference: 16/3101/FUL). The proposed flats will comprise of three one-bedroom flats and two two-bedroom flats. The proposed floor plans can be found in Appendix B of this report.

1.8 This Transport Statement has been prepared to assess the parking impact of the proposal on the adjoining road network and assess the proposed development's parking impact and arrangements.

2.0 SITE ACCESSIBILITY

2.1 The application site is adjacent to the corner site, located on the A313 High Street, close to the junction with Station Road. The A313 High Street hosts an array of local amenities, such as a local supermarket, hairdressers and restaurants.

2.2 The site is located within the High Street Teddington Conservation Area.

Public Transport

2.3 In terms of public transport, in order to demonstrate the accessibility attributes of the application site in the context of its surroundings, an accessibility audit and a public transport accessibility level (PTAL) assessment have been undertaken.

2.4 The PTAL system, widely used by local authorities and the Greater London Authority (GLA), assigns a 'score' to any given location based on the level of public transport accessible from the site within reasonable walk distances and wait times.

2.5 The level of available public transport at a point of interest in London is quantified and measured using Transport for London's (TfL) PTAL model.

2.6 TfL provides an online GIS-based PTAL tool on their website. The GIS-based PTAL tool uses spatial data such as point data files (e.g. bus stops) and vector files (e.g. walking network) to give a specific point of interest's PTAL score.

2.7 TfL's online GIS-based PTAL tool was used as a basis to research the application site's PTAL score. The results demonstrate that the application site has a PTAL score of 3 which indicates a 'moderate' accessibility to public transport as defined by TfL. The PTAL report produced by TfL is presented in Appendix B of this report. TfL's PTALs table is extracted as follows;

Table 3 Public Transport Accessibility Levels

PTAL	Range of Index	Map Colour	Description
1a (Low)	0.01 – 2.50		Very poor
1b	2.51 – 5.00		Very poor
2	5.01 – 10.00		Poor
3	10.01 – 15.00		Moderate
4	15.01 – 20.00		Good
5	20.01 – 25.00		Very Good
6a	25.01 – 40.00		Excellent
6b (High)	40.01 +		Excellent

2.8 The application site comprises of a total of six bus services with five of the six services all having a frequency of higher than four services an hour. All stops can be accessed from between 109 metres and 370 metres of the application site.

2.9 Table 1 below presents a summary of the bus services which can be accessed from the site.

Table 1: Bus Services

Route	Destinations	VPH	Distance
281	Tolworth - Surbiton - Kingston - Teddington - Fulwell - Twickenham - Whitton - Hounslow	7.5	109m
285	Heathrow Airport Central - Hatton Cross - Feltham - Uxbridge Road - Hampton Hill - Teddington - Kingston	6	109m
R68	Hampton Court - Hampton - Hampton Hill - Teddington - Strawberry Vale - Twickenham - Richmond - Kew Retail Park	4	109m
33	Fulwell Abellio London garage - Teddington - Twickenham - Richmond - East Sheen - Barnes Common - Hammersmith	7.5	221m
481	Brockley Rise - Crofton Park - New Cross - Elephant & Castle - Waterloo - Aldwych - Clerkenwell Green	1	370m
X26	Isleworth West Middlesex Hospital - Mogden Lane - Kneller Road - Nelson Road - Whitton - Hospital Bridge Road - Fulwell - Teddington - Sandy Lane - Hampton Wick - Kingston	2	370m

Source: TfL

2.10 The nearest railway station to the site is Teddington Railway Station which is located approximately 0.3 miles to the south of the site. Teddington Railway Station provides frequent train services to popular destinations including London Waterloo, with trains to London Waterloo going past popular destinations such as Kingston and Richmond Station.

Walking and Cycling

2.11 TfL publishes cycling guides; there are 14 guides in total covering the whole of London. All of the cycle routes presented in the guides have been ridden and recommended by cyclists. Copies of local guides can be picked up from any bike shops in a given area; copies can also be requested via the 'Cycling' section of the TfL website.

2.12 Transport for London's Local Cycle Guide 9 has been reviewed to research the local cycle routes to the site. Within each guide, cycle routes are categorised as follows:

- Yellow – Routes on quieter roads recommended by cyclists
- Light Blue – Routes signed or marked for use by cyclists on a mixture of quiet or busier roads
- Green – Off-road routes, either alongside roads, through parks, or along towpaths.

2.13 The site is situated on a yellow cycle route, and the site is also served by surrounding blue cycle routes.

2.14 In summary, the proposed development should be considered to be located in a sustainable location as the site has access to a number of public transport options, including a good variety of bus, rail and cycling options in close proximity to the site.

3.0 POLICY ASSESSMENT

3.1 A range of local, regional and national planning policies relating to the development have been examined as part of the preparation of this Transport Statement.

3.2 These include policies relating to the relationship between new development and transport. The relevant documents are set out in the following:

- Richmond Local Plan (adopted July 2018);
- London Plan (adopted 2015);
- National Planning Policy Framework (adopted July 2018).

Richmond Local Plan

3.3 Richmond Council's Local Plan sets out policies and guidance for the development of the borough over the next 15 years, and identifies where the main developments will take place, and how places within the borough will change, or be protected from change, over that period.

3.4 Policy LP 45 of Richmond's Local Plan relates to Parking Standards and Servicing. Policy LP 45 states that the council will require new development to make provision for the accommodation of vehicles, while minimising the impact of car-based travel. It states that car free development may only be appropriate in locations with high public transport accessibility levels (PTAL 5-6). Policy LP 45 on parking standards has been copied below for ease of reference;

Policy LP 45

Parking Standards and Servicing

Parking standards

The Council will require new development to make provision for the accommodation of vehicles in order to provide for the needs of the development while minimising the impact of car based travel including on the operation of the road network and local environment, and ensuring making the best use of land. It will achieve this by:

1. Requiring new development to provide for car, cycle, 2 wheel and, where applicable, lorry parking and electric vehicle charging points, in accordance with the standards set out in Appendix 3. Opportunities to minimise car parking through its shared use will be encouraged.
2. Resisting the provision of front garden car parking unless it can be demonstrated that:
   a. there would be no material impact on road or pedestrian safety;
   b. there would be no harmful impact on the character of the area, including the streetscape or setting of the property, in line with the policies on Local Character and Design; and
   c. the existing on-street demand is less than available capacity.
3. Car free housing developments may be appropriate in locations with high public transport accessibility, such as areas with a PTAL of 5 or 6, subject to:
   a. the provision of disabled parking;
   b. appropriate servicing arrangements; and
   c. demonstrating that proper controls can be put in place to ensure that the proposal will not contribute to on-street parking stress in the locality.

   All proposals for car free housing will need to be supported by the submission of a Travel Plan.
4. Managing the level of publicly available car parking to support the vitality and viability of town and local centres within the borough whilst limiting its impacts on the road network.

3.5 Appendix 3 which sets out the Council's car parking standards has been copied below for ease of reference;

LAND USE	PARKING STANDARD	CYCLE PARKING STANDARD
RESIDENTIAL (including conversion/extension of existing)		
	PTALs 0-3: 1- 2 bedrooms, 1 space	As per London Plan
	PTALs 0-3: 3+ bedrooms, 2 spaces	As per London Plan
	PTALs 4-6: as per London Plan although local circumstances, CPZ times and on-street parking conditions will need to be assessed.	As per London Plan

3.6 In accordance with Richmond Council the five flats could require a maximum of five car parking spaces, at an allocation of one space per residential unit.

3.7 As stated, cycle parking standards are to be set as per the London Plan. The London Plan cycle parking standards are copied below for ease of reference;

C3-C4	dwellings (all)	1 space per studio and 1 bedroom unit 2 spaces per all other dwellings	1 space per 40 units

3.8 In accordance with Richmond Council the five flats will require a minimum of seven cycle parking spaces.

National Planning Policy Framework, Department for Communities and Local Government (2018)

3.9 The National Planning Policy Framework (NPPF) was adopted in July 2018. The NPPF brings the Government's planning policies for England into a single document and describes how it expects these to be applied. The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development.

3.10 At the heart of the NPPF is a presumption in favour of sustainable development, which the Government states should be seen as a common theme running through both plan-making and decision-taking. It identifies a set of core land-use planning principles that should underpin both plan-making and decision-taking. A number of these are relevant to the Transport Assessment of the Proposed Development, "…that planning should….:

- *"Support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy)";*
- *"Contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser environmental value, where consistent with other policies in this Framework";*
- *"Encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value";*
- *"Actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable".*

3.11 Paragraph 111 of the National Planning Policy Framework requires that all developments that generate significant amounts of movement should be

supported by a Transport Statement or Transport Assessment. It goes on to state that "Plans and decisions should take account of whether:

- *"The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *Safe and suitable access to the site can be achieved for all people; and*
- *Improvements can be undertaken within the transport network that cost effectively limits the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe".*

3.12 Regarding parking standards, Paragraph 105 of the National Planning Policy Framework states that:

"If setting local parking standards for residential and non-residential development, local planning authorities should take into account:

- *The accessibility of the development;*
- *The type, mix and use of development;*
- *The availability of and opportunities for public transport;*
- *Local car ownership levels; and*
- *the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles"*

3.13 The above planning policy documents been taken into account as part of the development proposal.

4.0 BASELINE PARKING SURVEY

4.1 The first stage of assessing the parking impact of the proposed development is to survey the existing baseline conditions on the adjoining road network and unrestricted car parking areas in the 200 metre walk distance.

4.2 This parking survey has been conducted in accordance with the Richmond Parking Methodology. A copy of the methodology is presented in Appendix D.

4.3 The first stage of the parking survey is to map out the parking study area. All kerb space largely within a 200 metre distance of the application site has been measured using a measuring wheel and the on-street parking opportunities have been recorded to-scale onto Ordnance Survey (OS) mapping.

4.4 The parking study area has been curtailed or extended where it has been deemed appropriate as it is unlikely that someone seeking a parking spot would simply stop at an imaginary 200 metre line, surveyor discretion has therefore been applied. The full extent of the area included within this parking survey is presented in Figure 2.

4.5 The survey area has been split into individual streets or sections of streets comprising the following:

- Bridgeman Road;
- Cedar Road;
- Christchurch Avenue;
- Elmfield Avenue;
- Station Road;
- Waldegrave Road (A309).

4.6 The site will only be served by PHO T parking opportunities; therefore, despite Vicarage Road (PHO M1) being surveyed within the 200 metres it has been discounted from our analysis.

4.7 All vehicle crossovers and kerb space within 7.5 metres of junctions has been eliminated from the surveys. The remainder of the parkable kerb space within the survey area has been measured on-site. The total distance of kerb space between crossovers / junctions has been recorded and split into increments of 5 metres in accordance with the Richmond parking survey methodology.

4.8 All suitable space within the parking survey area contains a combination of unrestricted kerbside parking opportunities and PHO T parking opportunities. Table 2 demonstrates the parking inventory results for the survey area.

Table 2. On-Street Parking Survey Inventory

Road	Parking Inventory			
	Unrestricted		PHO T	
	Metres	Spaces	Metres	Spaces
Bridgeman Road	-	-	75	15
Cedar Road	-	-	95	19
Christchurch Avenue	-	-	120	24
Elmfield Avenue	220	44	-	-
Station Road	-	-	40	8
Waldergrave Road	-	-	135	27
Total	220	44	465	93

Source: PMA Survey
PHO T – Mon to Fri: 8:30am – 10:30am/Mon to Fri: 8:30am to 10pm
PHO M1 – Mon to Sun: 8:30am – 6:30am

4.9 The parking survey inventory demonstrates that there is a total of 44 unrestricted kerb side parking opportunities within the study area. All unrestricted parking opportunities are located on Elmfield Avenue.

4.10 The parking survey inventory demonstrates that there is a total of 93 PHO T parking opportunities within the study area. Refer to Figures 3a-f for the full parking survey inventory.

4.11 In addition, three disabled parking spaces were observed in the parking survey area. Any disabled parking spaces have been eliminated from the analysis.

Overnight Parking Survey Results

4.12 In accordance with Richmond Council's parking methodology two weekday (Mon to Thurs) and one Sunday am surveys between the hours of 01:00 and 05:30 are required. This will capture the residential peak parking time. In addition, in accordance with Richmond Council's parking methodology all cars parked during these surveys are to be marked with an "x".

4.13 The two weekday overnight surveys were undertaken on Monday 15th January 2019 and Tuesday 16th January 2019 at 03:30am and 01:30am on each night, respectively. One Sunday night survey was undertaken on Sunday 20th January 2019 at 02:30am.

4.14 Table 3 presents the average results from all overnight surveys. Additionally, refer to Appendix E for full overnight survey results.

Table 3. Average Overnight Parking Stress Results (Sunday and two x weekday)

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	12	3	78%
Cedar Road	-	-	-	-	19	17	2	88%
Christchurch Avenue	-	-	-	-	24	17	7	72%
Elmfield Avenue	44	30	15	67%	-	-	-	-
Station Road	-	-	-	-	8	6	2	71%
Waldergrave Road	-	-	-	-	27	19	8	70%
Total	44	30	15	67%	93	70	23	76%

Source: PMA Survey
Note: Some arithmetic errors due to rounding's

4.15 The results show that the observed average overnight parking stress of all unrestricted parking opportunities on the adopted highway within the survey area is 67%. Of the total 44 unrestricted parking opportunities within the study area 30 cars were observed to be parked on, leaving 15 available spaces.

4.16 The results show that the observed average overnight parking stress of PHO T parking opportunities on the adopted highway within the survey area is 76%. Of

the 93 total car parking opportunities within the study area 70 cars were observed to be parked on, leaving 23 available spaces.

4.17 The Richmond Parking Survey Methodology does not prescribe specific thresholds for when a parking survey area is deemed to suffer from undue parking stress. However, it is widely perceived by Richmond Council that an observed parking stress of 85% or more is deemed to represent a high uptake of kerb side parking.

4.18 The overnight parking survey results above demonstrate that the existing uptake of suitable unrestricted kerb-side parking and PHO T parking opportunities in close proximity to the site is not currently at a level where parking stress is deemed problematic.

4.19 In addition to calculating the overnight parking stress cars parked have been marked with an "x" on the inventory map to illustrate the exact location of parked cars and to show parking patterns on each of the overnight survey days. Figures 4a-c shows the exact locations of the parked cars on all three of the overnight survey days.

4.20 The cars marked with an "x" show that overnight parking on PHO T spaces in close proximity to the site (Station Road and Christchurch Avenue) currently have space capacity to accommodate additional cars.

Weekday Daytime Parking Survey Results

4.21 Due to the close proximity of Asquith Teddington Pre School and Day Nursery and the High Street half hour beats between the hours of 0730 and 0900 and 1500 and 1630 for one typical day during school time have been counted and the location of cars parked recorded to capture peak demand and parking uptake on the surrounding road network during nursery drop off and collection times. The location of each car during these survey beats has been noted on the inventory (marked with an "x"). Refer to Figure's 5a-h.

4.22 The weekday survey was undertaken on Thursday 17th January 2019, this was a normally running school day. Table 4 presents the existing baseline results for

morning parking uptake during the nursery morning drop off on one typical weekday.

Table 4. Morning Daytime Parking Uptake in Survey Area: Thursday 17th January 2019

Time	Unrestricted		PHO T	
	Number of Cars parked	Parking Stress	Number of Cars parked	Parking Stress
07:30	44	100%	66	71%
08:00	50	114%	66	71%
08:30	51	116%	62	67%
09:00	51	116%	65	70%

Source: PMA Survey
Note: Some arithmetic errors due to rounding's

4.23 The results demonstrate that during the hours of 0730am and 0900am parking stress of unrestricted parking opportunities on the adjoining road network exceeded capacity. Stress levels of over 100% were observed because small cars may need less space than five metres to park, meaning additional cars can be accommodated.

4.24 However, parking stress on all available PHO T parking opportunities in the survey area did at no point during the morning drop off period exceed 85%. PHO T parking uptake during the morning drop off was highest at 07:30am and 08:00am where the parking stress was observed at 71%. This demonstrates that parents do not use the PHO T bays to drop their children off to nursery.

4.25 Table 5 presents the existing baseline results for afternoon parking uptake during the nursery afternoon pick up on one typical weekday.

Table 5. Afternoon Daytime Parking Uptake in Survey Area: Thursday 17th January 2019

Time	Unrestricted		PHO T	
	Number of Cars parked	Parking Stress	Number of Cars parked	Parking Stress
15:00	51	116%	61	66%
15:30	51	116%	63	68%
16:00	50	114%	70	75%
16:30	49	111%	68	73%

Source: PMA Survey
Note: Some arithmetic errors due to rounding's

4.26 The results demonstrate that during the hours of 15:00 and 16:30 parking stress on unrestricted parking opportunities on the adjoining road network exceeded capacity.

4.27 However, parking stress on all available PHO T parking opportunities in the survey area did at no point during the afternoon pick up period exceed 85%. PHO T parking uptake during the afternoon pick up was highest at 16:00 where the parking stress was observed at 75%.

4.28 The results of the parking survey demonstrate that despite the uptake of unrestricted kerbside parking exceeding capacity, the uptake of PHO T parking in proximity to the application site during nursery peak times (school drop off and school pick up) and during general daytime activities is not currently at a level where existing parking stress is deemed to be problematic.

4.29 In addition to calculating the parking stress cars parked have been marked with an "x" on the inventory map to illustrate the exact location of parked cars and to show parking patterns at each survey beat during the daytime survey. Figure's 5a-h shows where the exact locations of the parked cars on both the morning and afternoon peak survey beats.

4.30 The cars marked with an "x" on the inventory map show that parking on PHO T spaces in close proximity to the site during the observed morning period and observed afternoon period currently have space capacity to accommodate

additional cars. It is demonstrated that parents do not use PHO T bays to drop and pick up their children from nursery.

5.0 PARKING IMPACT

5.1 The proposed development will see the conversion of two three-bedroom maisonettes into five self-contained flats. The proposed flats will comprise of three one-bedroom flats and two two-bedroom flats. No off-street parking will be provided under the proposal.

Parking Impact on Weekday Overnight Parking Stress

5.2 The results of the overnight on-street parking surveys in the preceding chapter of this report demonstrate that the average existing overnight parking stress of all obtainable unrestricted parking opportunities for the application site within the survey area is currently 67% and the average existing overnight parking stress of all PHO T parking opportunities for the application site within the survey area is currently 76%.

5.3 As discussed, in accordance with the Council's maximum parking standards the five flats could result in an additional five cars parked on the adjoining highway.

5.4 An additional five cars parked on the adjoining highway would increase overnight unrestricted parking stress by 13% from 67% to 80%.

5.5 An additional five cars parked on the adjoining highway would increase overnight PHO T parking stress by 5% from 76% to 81%.

5.6 The Richmond Parking Survey Methodology does not prescribe specific thresholds for when a parking survey area is deemed to suffer from undue parking stress. However, it is widely perceived by Richmond Council that an observed parking stress of 85% or more is deemed to represent a high uptake of kerb side parking.

5.7 Therefore, the proposals parking impact and parking for the proposed development up to the Council's standards is not going to have any detrimental effects on overnight parking stress on the adjoining road network

5.8 However, a parking demand created by the five flats is unlikely to produce a parking demand up to the Council's maximum parking standards, therefore these figures must be taken as a very much worst-case scenario.

5.9 In order to gain a greater and accurate understanding of the amount of local car ownership, census data has been researched using local ward census data from the most recent survey in 2011. Census data determines the likely demand that will be created from the proposal.

5.10 The 'Middle Layer Super Output Area' has been selected to reflect a minimum size of 5,000 residents and 2,000 households adjoining the development site, thus giving an accurate reflection of car ownership levels in the immediate locality.

5.11 Table 6 presents the 2011 car or van ownership census data for flats, apartments and maisonettes within the area adjoining the application site.

Table 6. Middle Output Area; Car or Van Ownership for Flat, Maisonette, Apartment

LC4415EW - Car or van availability	Borough		Middle Layer Super Output Area	
	Richmond Upon Thames		Richmond upon Thames 021	
	Count	%	Count	%
All Categories: Car or Van Availability	31,946	-	1385	-
No cars or vans in household	12,971	41%	583	42%
1 car or van in household	15,708	49%	670	48%
2 cars or vans in household	3,267	10%	132	10%

Source: Office for national statistics

5.12 As can be seen in the above table, 42% of flats in the local area do not own a car, 48% have one car and 10% have two cars.

5.13 Applying the Middle Layer Super Output Area car or van ownership census data, the five flats will generate demand for three cars; refer to Table 7.

Table 7. Residential Car Ownership Projections

Cars per Household	%	5 Flats	Total Cars
0	42%	2.1	0
1	48%	2.4	2
2	10%	0.5	1
Total	100%	5.0	3

Notes:
% = the middle layer car ownership data
5 flats = the proposed development
Total Cars = the projected parking demand
Some arithmetic errors due to rounding

5.14 Taking this likely scenario would mean that three cars would need to be accommodated for on the surrounding road network that adjoins the site. As a result the parking stress of unrestricted parking opportunities for the application site would increase by 8% from 67% to 75% and the parking stress of PHO T parking opportunities for the application site would increase by 2% from 76% to 78%.

5.15 The overnight parking survey results show that the development proposal is likely to have an insignificant impact on the adjoining highway in terms of parking capacity, road safety, and neighbouring amenity and parking demand as a result from the proposal. The proposals parking demand can be easily accommodated for on the adjoining road network.

Parking Impact on Weekday Daytime Parking Stress

5.16 As discussed, due to the application site's close proximity to Asquith Teddington Pre School and Day Nursery it has been deemed necessary that half an hour beats between the hours of 0730 and 0900 and 1500 and 1630 for one typical day during school time were undertaken. This is designed to capture peak demand and parking uptake on the surrounding road network during the nursery school drop off and collection times.

5.17 The results of the on-street parking surveys in the preceding chapter of this report demonstrate that during both the morning and afternoon nursery drop

of and pick up times unrestricted parking in the survey area exceeds parking capacity with unrestricted kerbside parking exceeding 100%.

5.18 However, the results also demonstrate that during both the morning and afternoon nursery drop off and pick up times PHO T parking uptake within the survey area does not vary greatly nor exceed 85%.

5.19 The highest morning school peak period was at 07:30am and 08:00am where the parking stress of all PHO T parking bays was observed at 71%.

5.20 In accordance with the Council's car parking standards the five flats could create a demand for up to five cars. An additional five cars onto the adjoining highway at the busiest time during the morning school peak period would increase PHO T parking stress by 5% from 71% to 76%.

5.21 The highest afternoon peak period was at 16:00 where the parking stress of all PHO T parking bays were observed at 75%.

5.22 An additional five cars onto the adjoining highway at this afternoon peak time would increase PHO T parking stress by 6% from 75% to 81%.

5.23 The results show that parking demand up to the Council's standards would not have any detrimental impacts on current parking demand created during nursery school drop off and pick up times.

5.24 As discussed, using 2011 census data the proposed five flats are likely to create a demand for three additional cars.

5.25 An increase of three cars onto the adjoining road network would increase parking stress during the highest morning school peak period by 3% from 71% to 74%.

5.26 In addition, an increase of three cars onto the adjoining road network would increase parking stress during the highest afternoon peak period by 3% from 75% to 78%.

5.27 In summary, both the overnight and daytime parking survey results show that the proposed five flats should be allowed to apply for a PHO parking permit on the adjoining highway.

5.28 Each of the five flats should be allowed to apply for a PHO parking permit on the adjoining highway as this would not have any detrimental effects on current highway capacity, safety or neighbouring amenity.

Cycle Parking

5.29 The five flats will provide eight long-stay cycle parking spaces. This is set in accordance to the minimum cycle parking standards set by Richmond Council, as per the London Plan.

5.30 Cycle parking will be in the rear garden at no.10 which can be accessed by all flats via the access road.

6.0 SUMMARY

6.1 Paul Mew Associates is instructed by Aspect Property Services Ltd to prepare a Transport Statement to support a planning application at 8a – 10a High Street, Teddington, TW11 8EW.

6.2 The local planning authority is the London Borough of Richmond upon Thames.

6.3 The application site is adjacent to the corner site, located on the A313 High Street, close to the junction with Station Road. The A313 High Street hosts an array of local amenities, such as a local supermarket, hairdressers and restaurants.

6.4 The proposed development will see the two three-bedroom existing maisonettes converted into five self-contained flats inclusive of a previously consented loft extension (reference number: 16/3101/FUL). The proposed flats will comprise of three one-bedroom flats and two two-bedroom flats.

6.5 The site has a Public Transport Accessibility Level (PTAL) score of 3 which is a 'moderate' accessibility rating to public transport as defined by Transport for London (TfL). In accordance with the PTAL report produced by TfL, the development site has access to six frequent London bus routes and Teddington railway station.

6.6 The development will have access to a number of public transport options, including a good variety of bus, rail and cycling options in close proximity to the site.

6.7 A parking survey has been conducted in accordance with the Richmond Parking Methodology. A copy of the methodology is presented in Appendix D.

6.8 The parking survey area contains a combination of unrestricted kerbside parking opportunities and PHO parking opportunities. The application site will only be served by PHO T parking opportunities.

6.9 The two weekday overnight surveys were undertaken on Monday 15th January 2019 and Tuesday 16th January 2019 at 03:30am and 01:30am on each night, respectively. One Sunday night survey was undertaken on Sunday 20th January 2019 at 02:30am.

6.10 The results show that the observed average overnight parking stress of all unrestricted parking opportunities on the adopted highway within the survey area is 67%. Of the total 44 unrestricted parking opportunities within the study area 30 cars were observed to be parked on, leaving 15 available spaces.

6.11 The observed average overnight parking stress of all PHO T parking opportunities on the adopted highway within the survey area is 76%. Of the 93 total car parking opportunities within the study area 70 cars were observed to be parked on, leaving 23 spaces free.

6.12 The Richmond Parking Survey Methodology does not prescribe specific thresholds for when a parking survey area is deemed to suffer from undue parking stress. However, it is widely perceived by Richmond Council that an observed parking stress of 85% or more is deemed to represent a high uptake of kerb side parking.

6.13 The results above demonstrate that the existing uptake of suitable unrestricted kerb-side parking and PHO T parking opportunities in close proximity to the site is not currently at a level where parking stress is deemed problematic.

6.14 The cars marked with an "x" show that overnight parking on PHO spaces in close proximity to the site (Station Road and Christchurch Avenue) currently has space capacity to accommodate additional cars.

6.15 Due to the close proximity of Asquith Teddington Pre School and Day Nursery and the High Street half hour beats between the hours of 0730 and 0900 and 1500 and 1630 for one typical day during school time have been counted and the location of cars parked recorded to capture peak demand and parking uptake on the surrounding road network during nursery drop off and collection times.

6.16 The weekday survey was undertaken on Thursday 17th January 2019, this was a normal running school day.

6.17 The morning peak survey results demonstrate that during the hours of 0730 and 0900 parking stress of unrestricted parking opportunities on the adjoining road network exceeded capacity. Stress levels of over 100% have been observed because small cars may need less space than five metres to park, meaning additional cars can be accommodated.

6.18 However, parking stress on all available PHO parking opportunities in the survey area did at no point during the morning drop off period exceed 85%. PHO T parking uptake during the morning drop off was highest at 07.30am and 08.00am where the parking stress was observed at 71%. This demonstrates that parents do not use the PHO T bays to drop their children off to nursery.

6.19 The results demonstrate that during the hours of 15:00 and 16:30 parking stress on unrestricted parking opportunities on the adjoining road network exceeded capacity.

6.20 However, parking stress on all available PHO T parking opportunities in the survey area did at no point during the afternoon pick up period exceed 85%. PHO T parking uptake during the afternoon pick up was highest at 16:00 where the parking stress was observed at 75%.

6.21 This demonstrates that despite the uptake of daytime unrestricted kerbside parking exceeding capacity, the uptake of PHO T parking in proximity to the application site during nursery peak times (school drop off and school pick up) and during general daytime activities is not currently at a level where existing parking stress is deemed to be problematic.

6.22 In addition, parking on PHO T spaces in close proximity to the site during the observed morning period and observed afternoon period currently have space capacity to accommodate additional cars. It is shown that parents do not use PHO T bays to drop and pick up their children from nursery.

6.23 In accordance with the Council's maximum parking standards the five flats could result in an additional five cars parked on the adjoining highway.

6.24 An additional five cars parked on the adjoining highway would increase overnight unrestricted parking stress by 13% from 67% to 80%.

6.25 An additional five cars parked on the adjoining highway would increase overnight PHO T parking stress by 5% from 76% to 81%.

6.26 Therefore, a parking demand up to the council's standards will not have any significant effects on overnight unrestricted parking stress and PHO T parking stress on the adjoining road network.

6.27 However, the parking demand created by the five flats is unlikely to produce a parking demand up to the Council's maximum parking standards, therefore these figures must be taken as a very much worst-case scenario.

6.28 Applying the Middle Layer Super Output Area car or van ownership census data, it is predicted that the five flats will generate demand for three cars.

6.29 Taking this likely scenario would mean that three cars would need to be accommodated for on the surrounding road network that adjoins the site. As a result the parking stress of unrestricted parking opportunities for the application site would increase by 8% from 67% to 75% and the parking stress of PHO T parking opportunities for the application site would increase by 2% from 76% to 78%.

6.30 Therefore, the development proposal is likely to have an insignificant impact on overnight parking stress on the adjoining highway in terms of parking capacity, road safety, and neighbouring amenity. Parking demand created under the proposal is likely to go unnoticed and fall within nightly fluctuations of parking demand.

6.31 As discussed, due to the application site's close proximity to Asquith Teddington Pre School and Day Nursery it has been deemed necessary that half an hour

beats between the hours of 0730 and 0900 and 1500 and 1630 for one typical day during school time were undertaken.

6.32 In accordance with the Council's car parking standards the five flats could create a demand for up to five cars. An additional five cars onto the adjoining highway at the busiest time during the morning school peak period would increase PHO T parking stress by 5% from 71% to 76%. In addition, an additional five cars onto the adjoining highway at this afternoon peak time would increase PHO T parking stress by 6% from 75% to 81%.

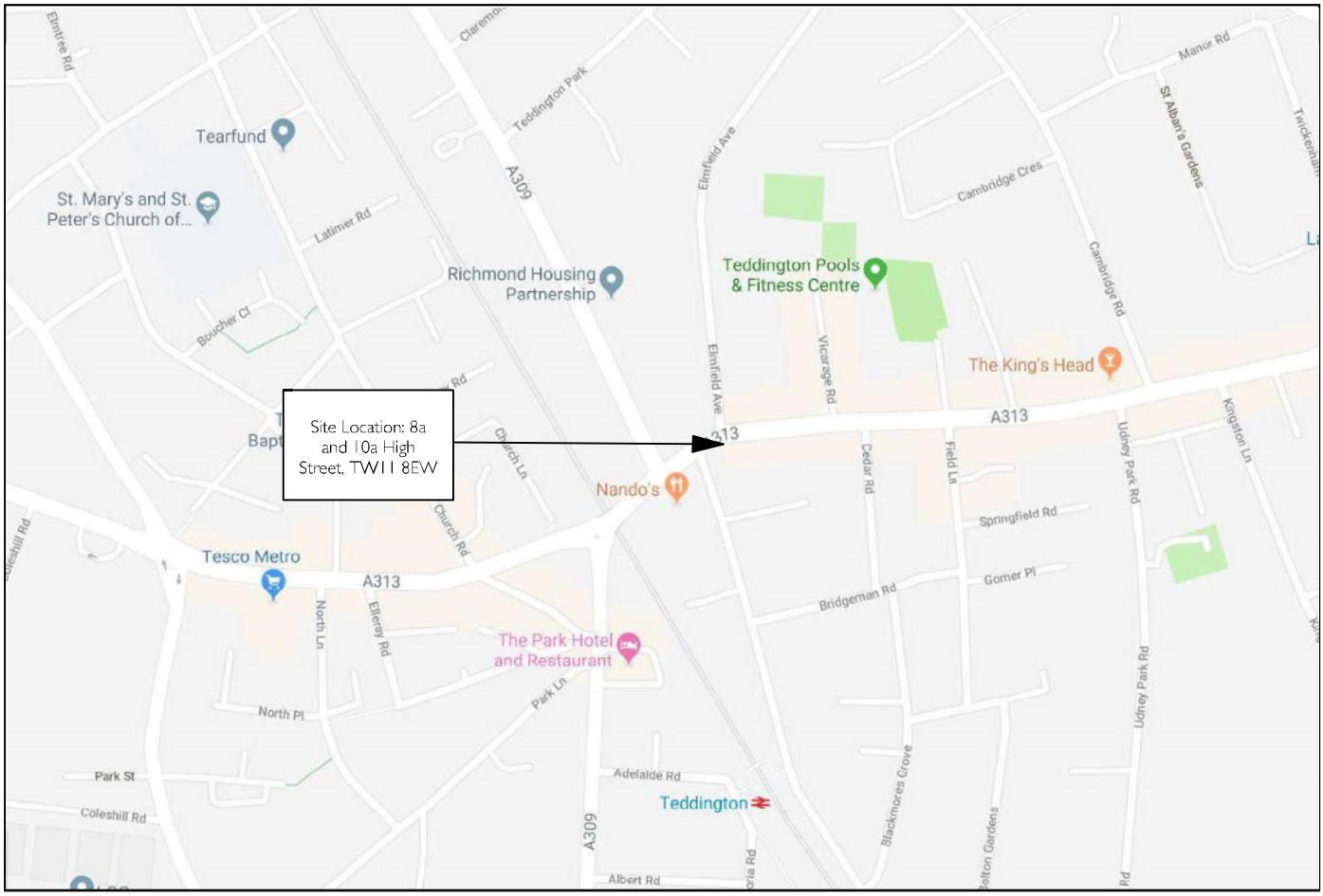
6.33 As discussed, using 2011 census data the proposed five flats are likely to create a demand for three additional cars. An increase of three cars onto the adjoining road network would increase parking stress during the highest morning school peak period by 3% from 71% to 74%. In addition, an increase of three cars onto the adjoining road network would increase parking stress during the highest afternoon peak period by 3% from 75% to 78%.

6.34 The five flats will provide eight long-stay cycle parking spaces. This is set in accordance to the minimum cycle parking standards set Richmond Council, as per the London Plan.

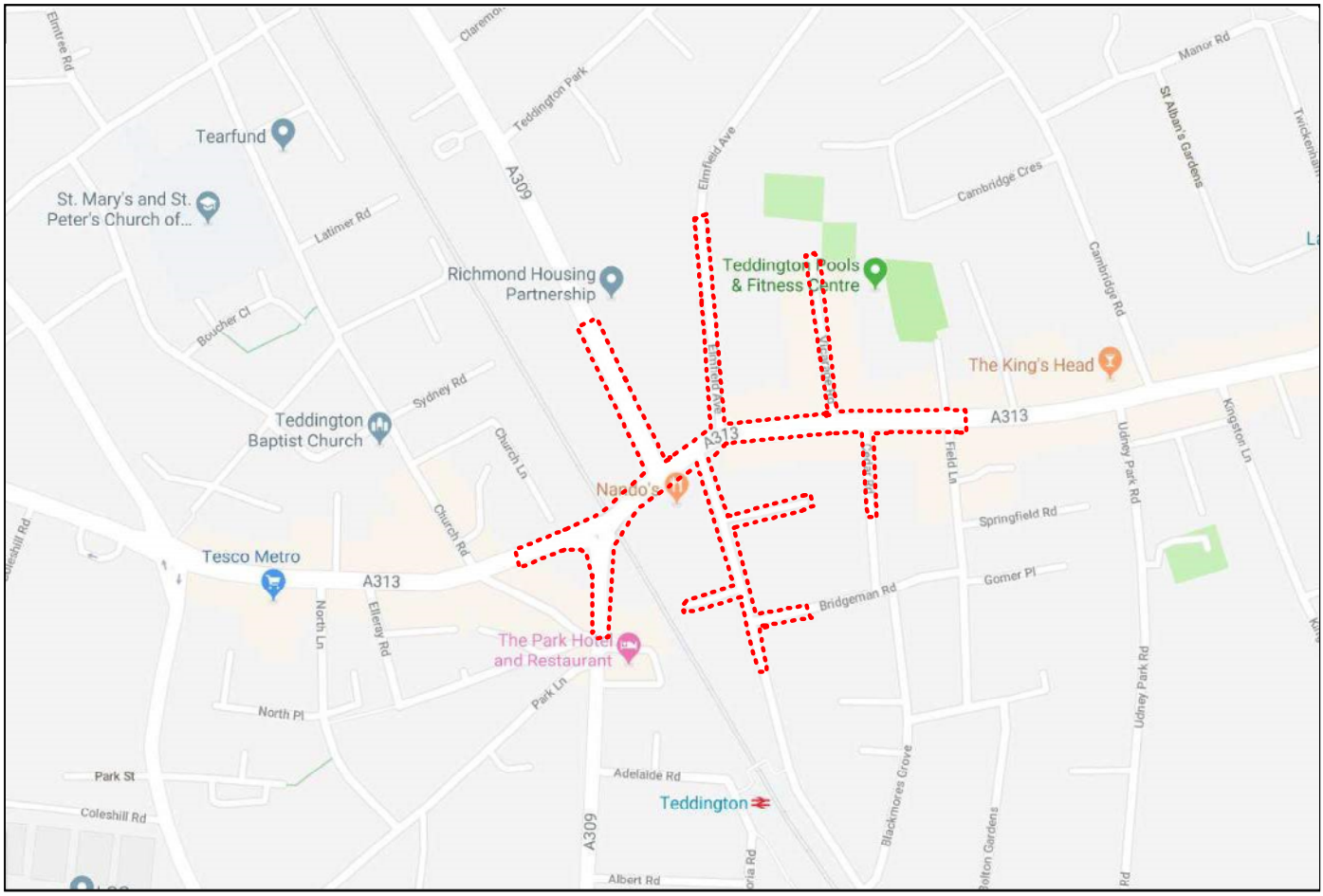
6.35 In summary, both the overnight and daytime parking survey results show that the proposed five flats should be allowed to apply for a PHO parking permit on the adjoining highway.

6.36 Each flat should be allowed to apply for a PHO parking permit on the adjoining highway as this would not have any detrimental effects on current highway capacity, safety or neighbouring amenity.

FIGURES



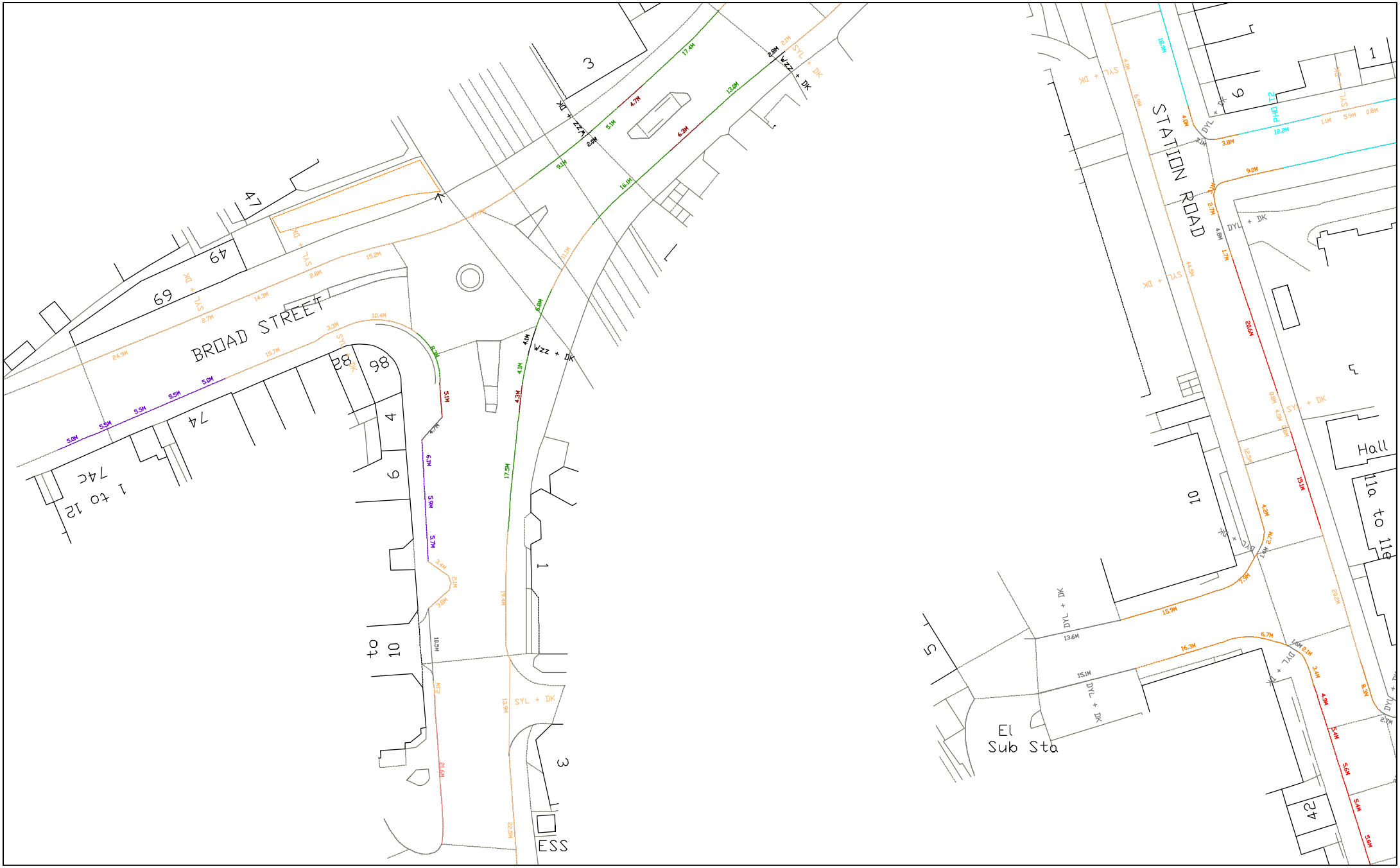
Date: January 2019 Scale: NTS Source: Google Maps Drawing No: P2057/TS/01	P2057: 8a and 10a High Street, Teddington, TW11 8EW Figure 1. Site Location.	PAUL MEW ASSOCIATES TRAFFIC CONSULTANTS



Date: January 2019
Scale: NTS
Source: Google Maps
Drawing No: P2057/TS/02

P2057: 8a and 10a High Street, Teddington, TW11 8EW
Figure 2.
Parking Survey Area.

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS

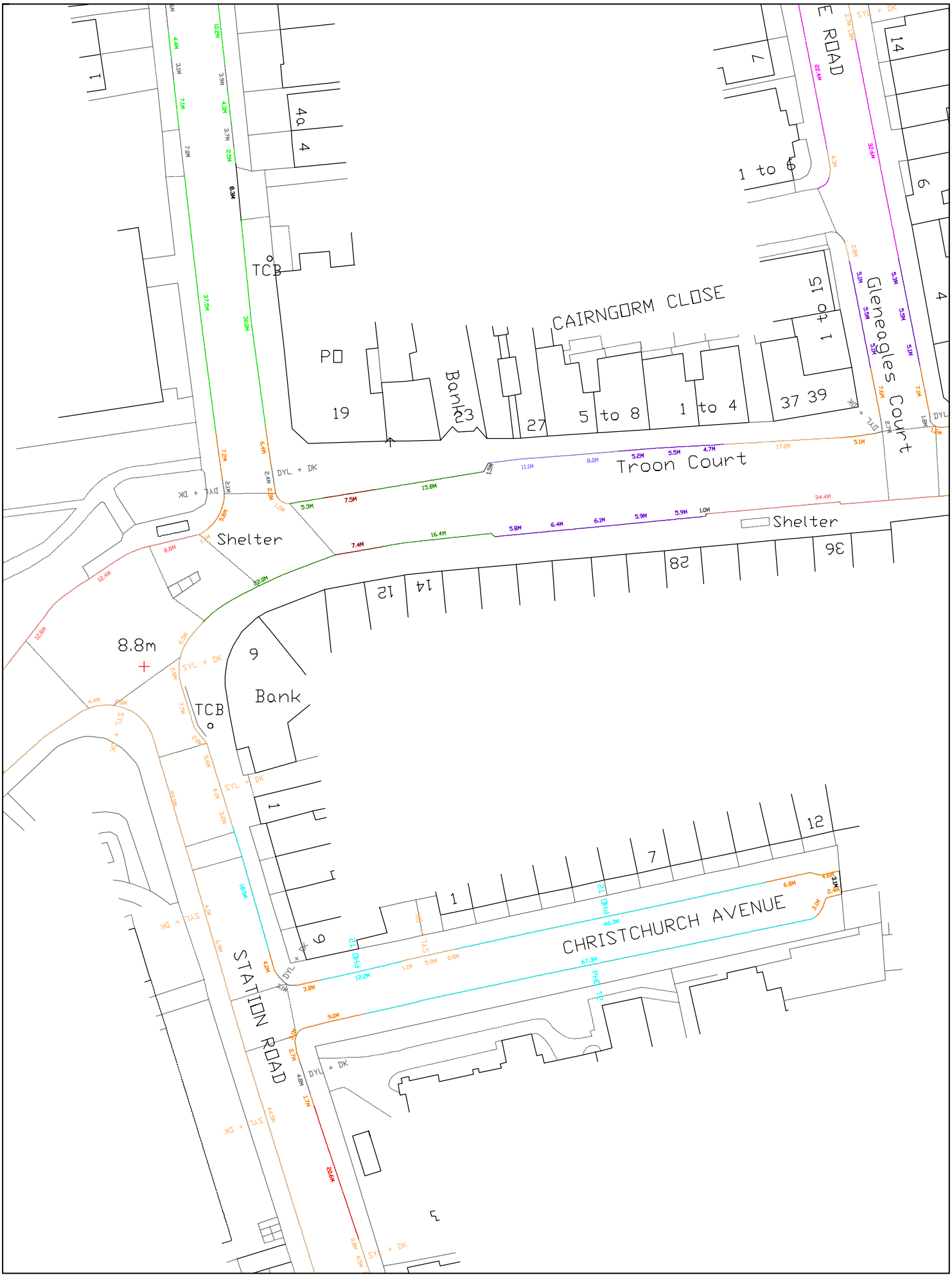


Date: January 2019
Scale: 1:500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/03

N

P2057: 8a-10a High Street, Teddington, TW11 8EW
Figure 3a.
Parking Survey Inventory

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London, SW18 1HZ
Tel: 020 8780 0476
E-mail: paul.mew@pma-traffic.co.uk Websi.e: www.pma-traffic.co.uk



Date: January 2019
Scale: 1:500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/03

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 3b.
Parking Survey Inventory

PAUL MEW ASSOCIATES
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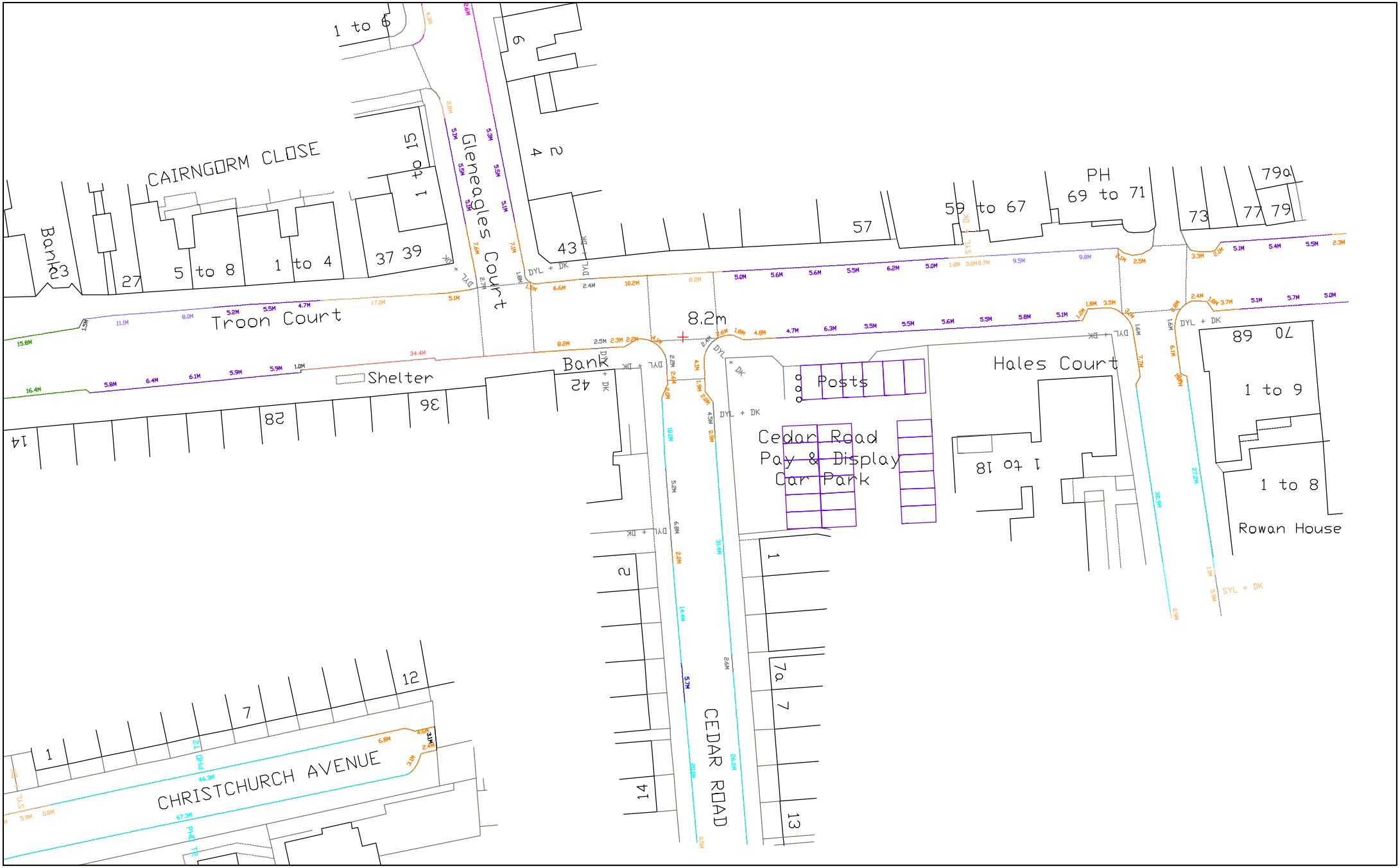

Date: January 2019
Scale: 1:500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/03

N

P2057: 8a-10a High Street, Teddington, TW11 8EW
Figure 3c.
Parking Survey Inventory

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
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Tel: 020 8780 0476
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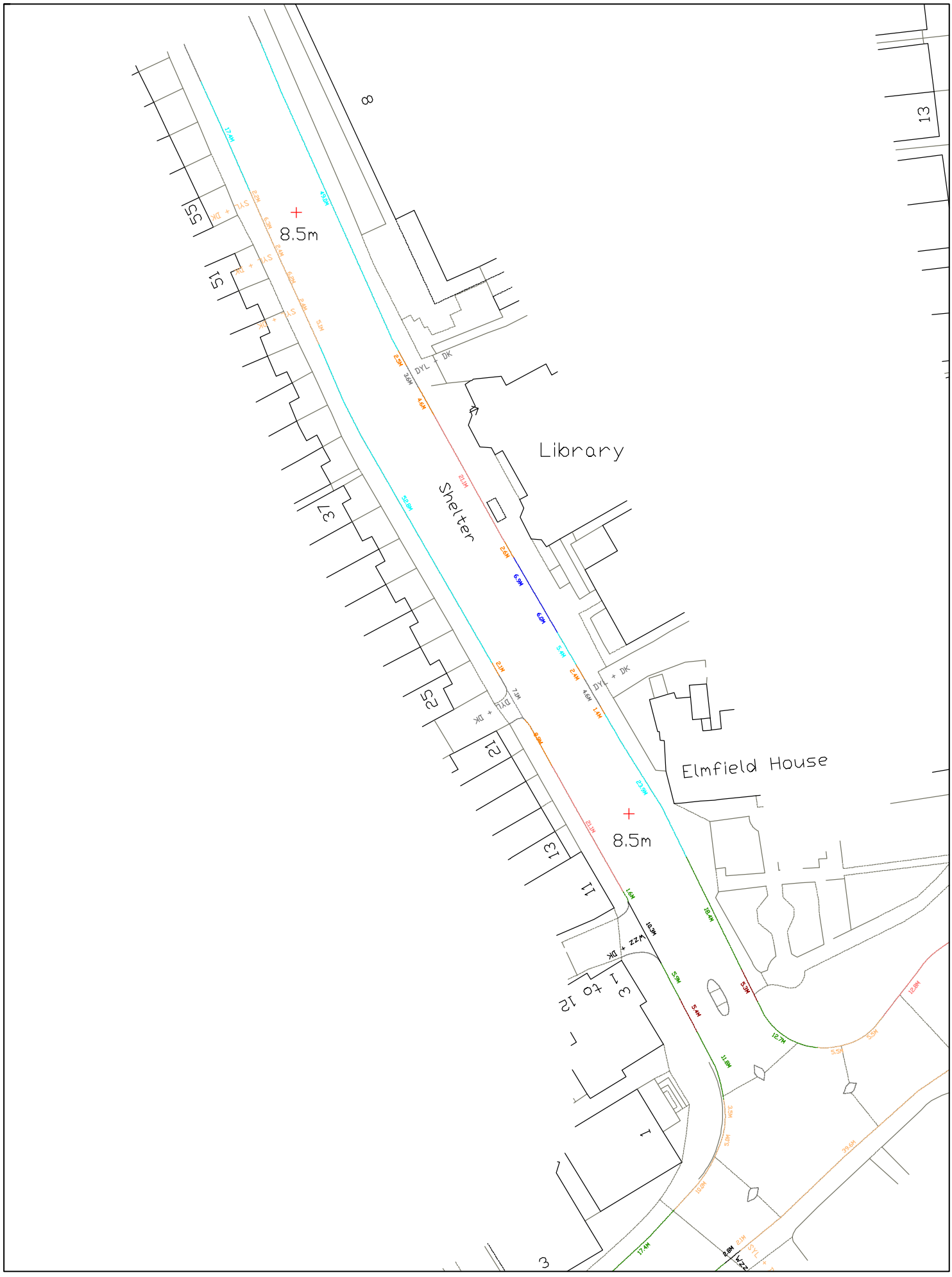

Date: January 2019
Scale: 1:500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/03

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 3d.
Parking Survey Inventory

PAUL MEW ASSOCIATES
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Date: January 2019
Scale: 1:500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/03

N

P2057: 8a-10a High Street, Teddington, TW11 8EW
Figure 3e.
Parking Survey Inventory

PAUL MEW ASSOCIATES
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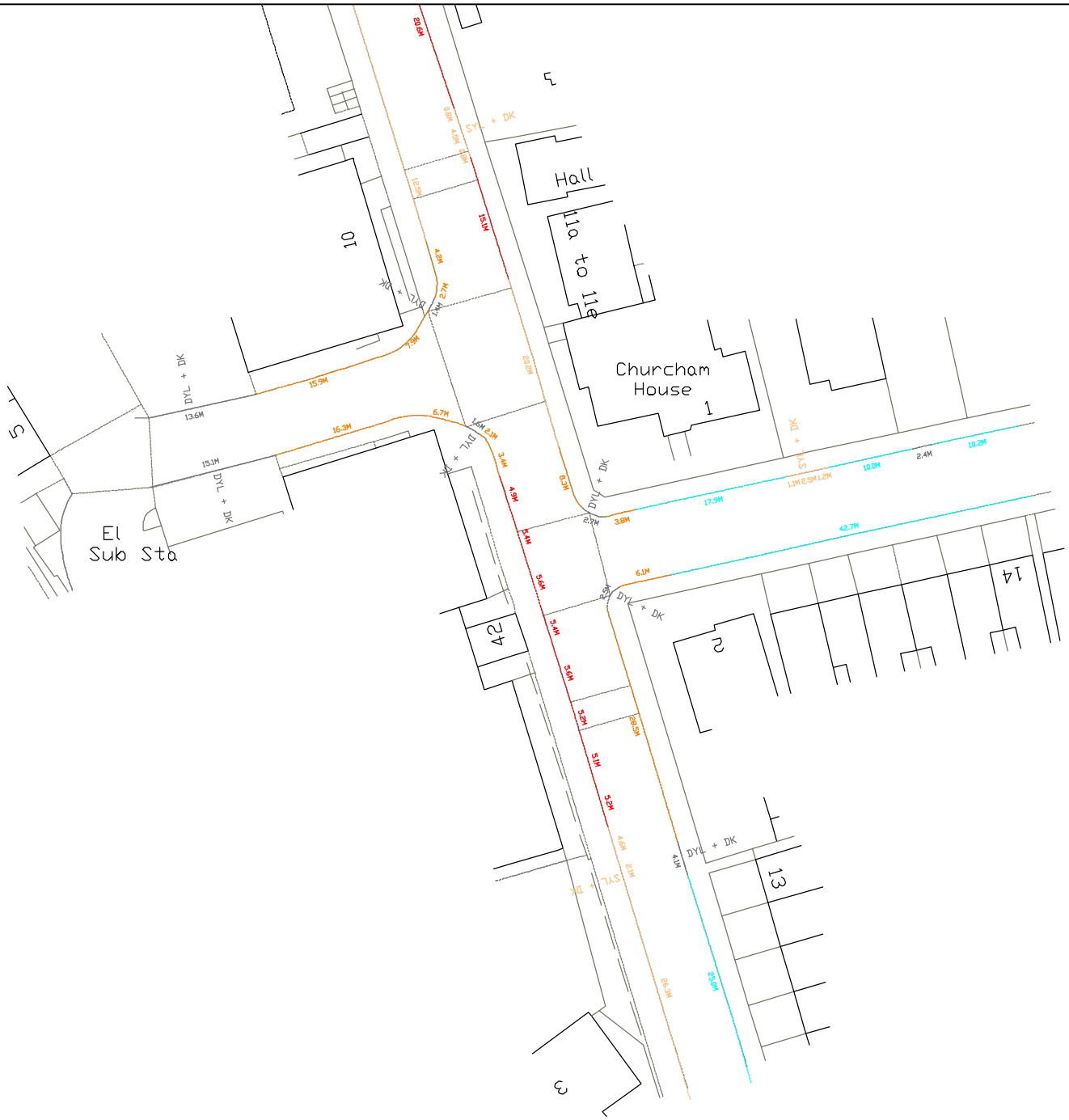
E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk



Date: January 2019
Scale: 1:500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/03

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 3f.
Parking Survey Inventory

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
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E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/04

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 4a.
Location of Cars Parked: Monday 15th January at 03:30am

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
Tel: 020 8780 0426
E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/04

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 4b.
Location of Cars Parked: Tuesday 16th January at 01:30am

PAUL MEW ASSOCIATES
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Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
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Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/04

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 4c.
Location of Cars Parked: Sunday 20th January at 02:30am

PAUL MEW ASSOCIATES
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Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/05

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 5a.
Location of Cars Parked: Thursday 17th January at 07:30am

PAUL MEW ASSOCIATES
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Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
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Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/05

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 5b.
Location of Cars Parked: Thursday 17th January at 08:00am

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
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E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/05

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 5c.
Location of Cars Parked: Thursday 17th January at 08:30am

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
Tel: 020 8780 0426
E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/05

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 5d.
Location of Cars Parked: Thursday 17th January at 09:00am

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
Tel: 020 8780 0426
E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/05

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 5e.
Location of Cars Parked: Thursday 17th January at 15:30am

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
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E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/05

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 5f.
Location of Cars Parked: Thursday 17th January at 15:30pm

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
Tel: 020 8780 0426
E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/05

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 5g.
Location of Cars Parked: Thursday 17th January at 16:00pm

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London SW18 1HZ
Tel: 020 8780 0426
E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

Date: January 2019
Scale: 1:1500@A3
Source: Ordnance Survey
Drawing No. P2057/TS/05

N

P2057: 8a -10a High Street, Teddington, TW11 8EW
Figure 5h.
Location of Cars Parked: Thursday 17th January at 16:30pm

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
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Tel: 020 8780 0426
E-mail: paulmew@pma-traffic.co.uk Website: www.pma-traffic.co.uk

APPENDIX A
Site Boundary

NATIONAL MAP CENTRE

OS Plan B&W

Metres
0 5 10 20 30 40 50

Scale: 1:1250

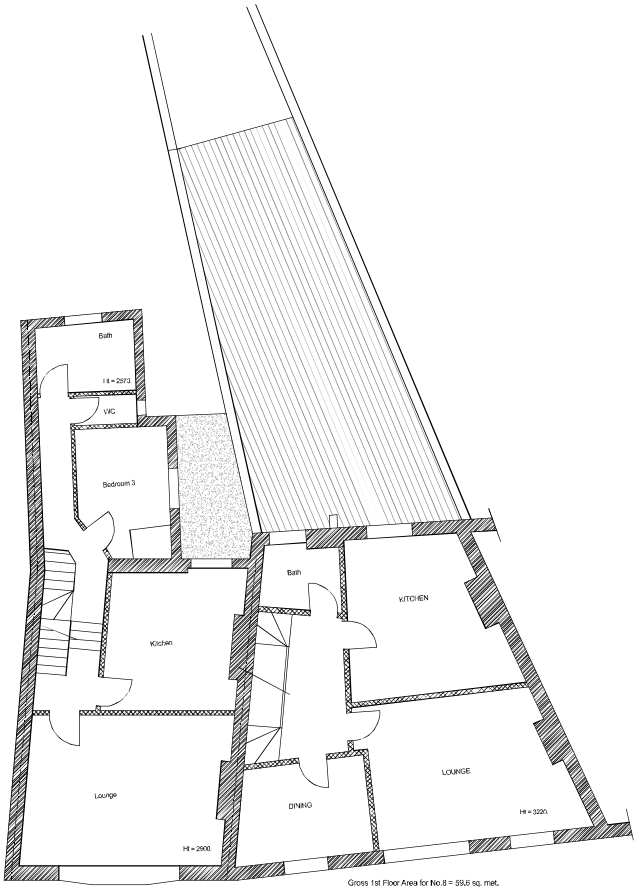
Map data

8 High Street
Teddington
TW11 8EW

Supplied by:	National Map Centre
License number:	100031961
Produced:	08/01/2019
Serial number:	2066636

Plot centre co-ordinates:	515985,171094
Download file:	aspectprop_8highst.zip
Project name:	aspectprop_8highst

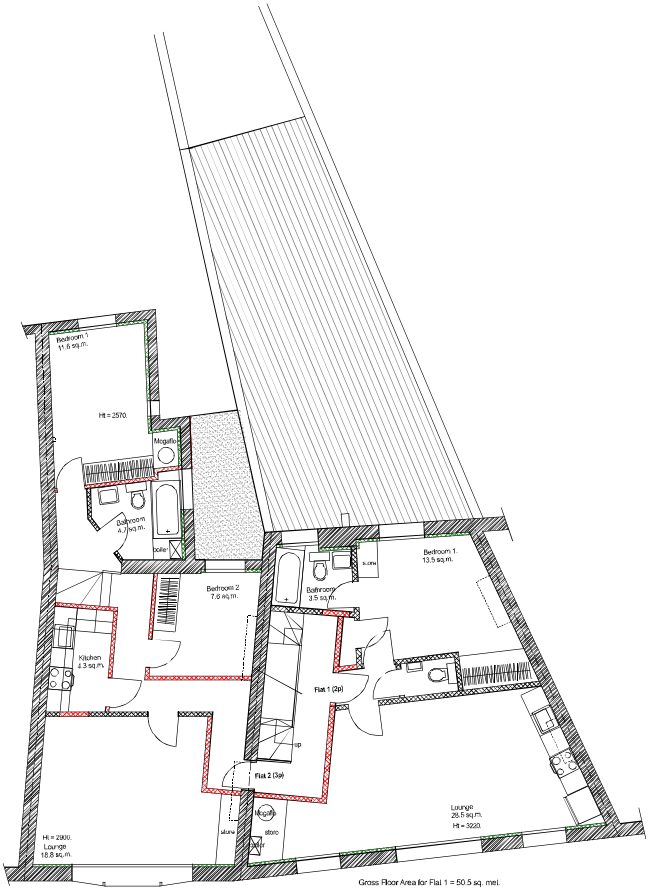
APPENDIX B
Proposed Site Plan



Gross 1st Floor Area for No.10 = 60.8 sq. met.

Gross 1st Floor Area for No.8 = 59.6 sq. met.

FIRST FLOOR LAYOUT (existing)
scale 1:50



Gross Floor Area for Flat 2 = 61.3 sq. met.

Gross Floor Area for Flat 1 = 50.5 sq. met.

FIRST FLOOR LAYOUT (proposed)
scale 1:50

NOTES

R	Date	Description
B	06-09-2017	FOR PLANNING APPROVAL
A	11-08-2017	FOR PLANNING APPROVAL

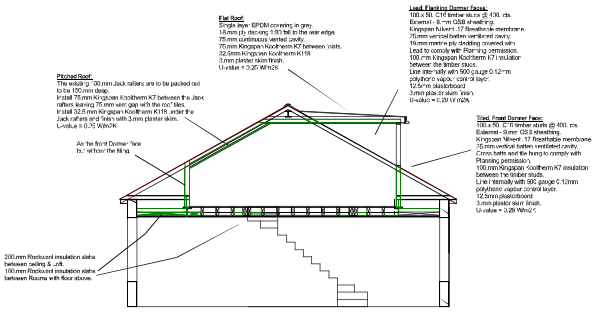
ASPECT
PROPERTY SERVICES LIMITED
11 Ickenham Road, Ruislip, Middlesex HA4 7BT
tel : 01895 675233

Project:
8-10 HIGH STREET
TEDDINGTON
TW11 8EW

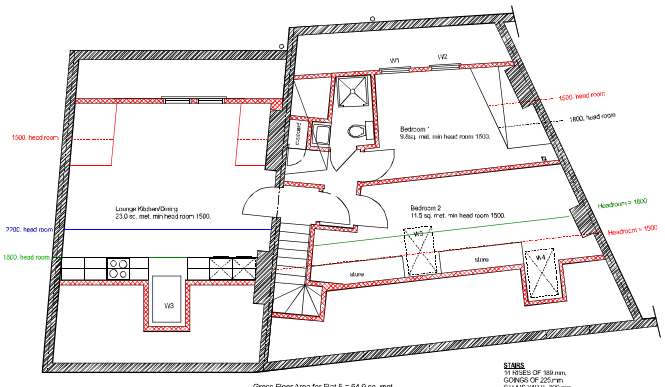
Title:
FIRST FLOOR PLANS

Scale	Drawn	Date
1:50 or A1		April'22 /

Job No.	No.	Rev.
2080	.02	B



LOFT EXTENSION INSULATION



Gross Floor Area for Flat 5 = 64.9 sq. met.
58.0 sq. met floor space, headroom >1500.
6.9 sq. met storage.

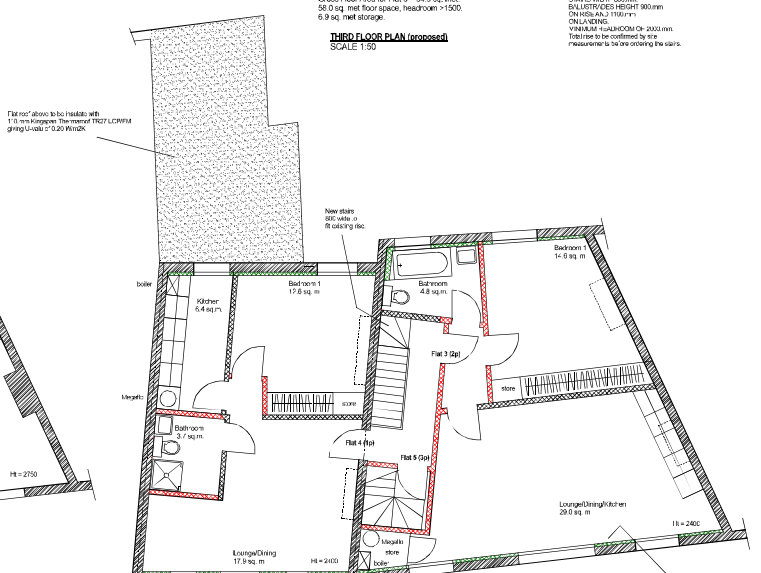
THIRD FLOOR PLAN (proposed)
SCALE 1:50

STAIRS
11 RISES OF 189 mm.
GOINGS OF 225 mm.
STAIRS WIDTH 800 mm.
BALUSTRADES HEIGHT 900 mm
ON RISE AND 1100 mm
ON LANDING.
MINIMUM HEADROOM OF 2000 mm.
Total rise to be confirmed by site measurement to be one ordering the stairs.

Gross 2nd Floor Area for No.10 = 39.3 sq. met.

Gross 1st Floor Area for No.8 = 59.3 sq. met.

SECOND FLOOR LAYOUT (existing)
scale 1:50



Gross Floor Area for Flat 4 = 44.0 sq. met.

Gross Floor Area for Flat 3 = 52.2 sq. met.

STAIRS
14 RISES OF 185 mm.
GOINGS OF 225 mm.
STAIRS WIDTH 800 mm.
BALUSTRADES HEIGHT 900 mm
ON RISE AND 1100 mm
ON LANDING.
MINIMUM HEADROOM OF 2000 mm.
Total rise to be confirmed by site measurements before oreering the stairs.

50 mm Kooltherm K11 between 75 mm studs
32.5mm Kooltherm K118 insulatec plasterboard
with 3 mm skim. U-value = 0.25 W/m2K
To rest of all external walls.

SECOND FLOOR LAYOUT (proposed)
scale 1:50

NOTES

R	Date	Description
B	13-09-2017	FOR PLANNING APPROVAL
A	27-08-2017	FOR PLANNING APPROVAL

ASPECT
PROPERTY SERVICES LIMITED
11 Ilchester Road, Ruislip, Middlesex HA4 7ST
tel : 01895 675233

Project:
8-10 HIGH STREET
TEDDINGTON
TW11 8EW

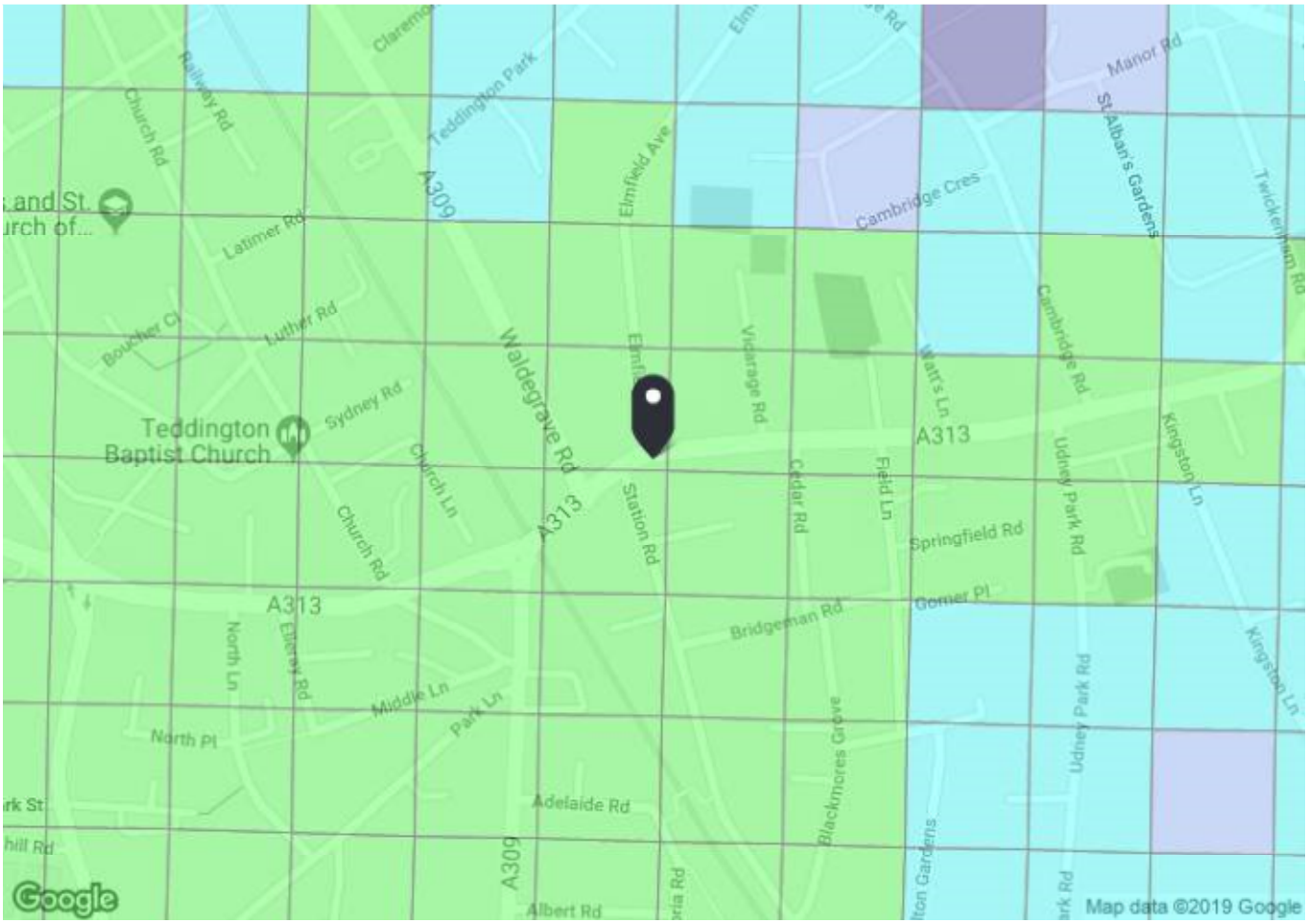
Title:
SECOND & THIRD FLOORS PLAN

Scale	Drawn	Date
1:50 or A1		April'17

Job no.	Dwg.	Rev.
2080	.03	B.

APPENDIX C
PTAL Output Report

TRANSPORT FOR LONDON



PTAL output for Base Year
3

8 High St, Teddington TW11 8EW, UK
Easting: 515985, Northing: 171101

Grid Cell: 36529

Report generated: 03/01/2019

Map key - PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

Map layers

PTAL (cell size: 100m)

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

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	TEDDINGTON HIGH STREET	281	108.77	7.5	1.36	6	7.36	4.08	1	4.08
Bus	TEDDINGTON HIGH STREET	285	108.77	6	1.36	7	8.36	3.59	0.5	1.79
Bus	TEDDINGTON HIGH STREET	R68	108.77	4	1.36	9.5	10.86	2.76	0.5	1.38
Bus	TEDDINGTON PARK ROAD	481	369.96	1	4.62	32	36.62	0.82	0.5	0.41
Bus	TEDDINGTON PARK ROAD	X26	369.96	2	4.62	17	21.62	1.39	0.5	0.69
Bus	TEDDINGTON LIBRARY	33	220.95	7.5	2.76	6	8.76	3.42	0.5	1.71
Rail	Teddington	'WATRLMN-SHEPRTN 2H09'	442.78	2	5.53	15.75	21.28	1.41	1	1.41
Rail	Teddington	'SHEPRTN-WATRLMN 2H10'	442.78	2	5.53	15.75	21.28	1.41	0.5	0.7
Rail	Teddington	'WIDON-WATRLMN 2K03'	442.78	0.33	5.53	91.66	97.19	0.31	0.5	0.15
Rail	Teddington	'WATRLMN-WATRLMN 2K09'	442.78	2	5.53	15.75	21.28	1.41	0.5	0.7
Rail	Teddington	'WATRLMN-WATRLMN 2O09'	442.78	2	5.53	15.75	21.28	1.41	0.5	0.7
Rail	Teddington	'TEDNGTN-WATRLMN 2O90'	442.78	0.33	5.53	91.66	97.19	0.31	0.5	0.15
Rail	Teddington	'TWCKNHM-WATRLMN 2O92'	442.78	0.67	5.53	45.53	51.06	0.59	0.5	0.29
									Total Grid Cell AI:	14.17

APPENDIX D
Richmond Parking Methodology

Richmond Parking Survey Methodology as confirmed by Mary Toffi 15/11/16

The area to be surveyed must cover a 200m/2 minute walking distance around the site. This area can be extended/amended in the following ways:

1. If the survey at reaches the middle of a street at 200m the survey area could be extended to the next junction with agreement of Transport Planning officers
2. If there are areas within 200m where parking is restricted due to on street restrictions or undesirable (for which justification must be given) the area is to be curtailed
3. Areas outside of Richmond will be excluded
4. Roads in CPZ's adjacent to the site, which the site would not be able to access parking permits for will be excluded unless surveys of these roads are agreed with Transport Planning officers.

The Council may require amending surveys which reveal anomalies or require further investigation once scrutinised.

Survey times

Surveys must only be undertaken during term time and not within public/school holidays/half term or the week before/after to take into account independent school holidays. It is best to contact the Council to confirm acceptable survey dates and dates which coincide with an event in the area, which must also be avoided as these could impact on the results.

For residential surveys 2 x weekday (Mon to Thurs) and 1xSunday am surveys between 01h00 and 05h30 are required. This will capture the residential peak parking time.

Commercial and other land use applications will require surveys at other times which are to be agreed with the Council in advance of the survey being undertaken. Similarly, times may be amended for residential surveys where the site is within close proximity to commercial uses or a town centre in which case morning and early evening surveys may also be requested. More detailed surveys may be required if the operational times clash with nearby restaurants, in which case 15 minute interval surveys between 18h00 and 22h00 will also be required. In order to assess commuter parking morning and evening peak hour surveys will be required for sites within close proximity to railway stations. These should be undertaken between 06h30 – 08h00 and 17h30 – 19h00.

Required information

Surveys must be provided in map form on which x's show parked cars and s's show empty spaces exactly where they are parked on the night. This will give us a snapshot of exactly how cars are parked in that area, rather than a calculated assumption, which is often incorrect.

Noted on the survey map should be the date and time the survey was undertaken as well as whether the area is within a Community Parking Zone (CPZ) or not. All parking restrictions on street must be noted Double/Single Yellow Lines (D/SYL's), bus lay-by's, kerb build outs, legal footway parking, dropped kerbs, disabled/doctors/loading/car club bays, suspensions/temporary restrictions, skips and road works, narrow roads, where parking is not possible or subject to

flooding etc. An inventory sheet must be provided showing lengths of parking and restrictions must all be individually dimensioned to determine the number of bays in the area. If there are marked bays on street these must be shown and dimensioned on the map. The space between crossovers should also be dimensioned although areas of less than 5.0m should not be included in the calculations.

The first 7.5m of a junction is to be omitted, but cars parked within will be considered in the calculations as contributing to on street stress. Illegally parked cars must be shown on the plan and these will be included in the stress calculation.

Surveys undertaken within CPZ's during CPZ hours will need to clearly define various types of bays (Resident permit holders/shared use bays/Business Bays etc).

Where restrictions start early in the morning we may not consider these areas for overnight parking if the surveys show that residents do not park there as they will have to move their cars before the restriction commences. This includes single yellow lines. The red route will not be included in the survey as this is operational between 7am and 7pm.

The above information can be tabulated, but this table must reflect the information on the map rather than a measured calculation of cars parked against bay lengths divisible by 5.0m. Available bays on street must be calculated using the inventory sheet and 5.0m bay lengths. X's will be counted as parked cars. Tabulated results should be by road and include a 'Total' column.

Results

In order to assess the survey the Council will calculate the current on street stress of parked cars against total available space on the night and add the shortfall to calculate the anticipated stress. LBRuT will consider appropriate extant planning permissions in the area and if stress levels are calculated at 85% stress or more LBRuT will raise an objection on the grounds of saturated parking, highway safety and undue harm to neighbour amenity.

APPENDIX E
Overnight Parking Survey Results

P2057 - 8a -10a High Street, Teddington Parking Stress Survey

Overnight Parking Survey 1: Monday 15th January 2019 at 03:30am

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	11	4	73%
Cedar Road	-	-	-	-	19	18	1	95%
Christchurch Avenue	-	-	-	-	24	16	8	67%
Elmfield Avenue	44	30	14	68%	-	-	-	-
Station Road	-	-	-	-	8	6	2	75%
Waldergrave Road	-	-	-	-	27	20	7	74%
Total	44	30	14	68%	93	71	22	76%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's

Overnight Parking Survey 2: Tuesday 16th January 2019 at 01:30

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	13	2	87%
Cedar Road	-	-	-	-	19	17	2	89%
Christchurch Avenue	-	-	-	-	24	17	7	71%
Elmfield Avenue	44	29	15	66%	-		-	-
Station Road	-	-	-	-	8	5	3	63%
Waldergrave Road	-	-	-	-	27	18	9	67%
Total	44	29	15	66%	93	70	23	75%

Source: PMA Survey

Note: Some arithmetic errors due to rounding

Overnight Parking Survey 3: Sunday 20th January 2018 at 02:30

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	11	4	73%
Cedar Road	-	-	-	-	19	15	4	79%
Christchurch Avenue	-	-	-	-	24	19	5	79%
Elmfield Avenue	44	30	15	67%	-	-	-	-
Station Road	-	-	-	-	8	6	2	75%
Waldergrave Road	-	-	-	-	27	19	8	70%
Total	44	30	15	67%	93	70	23	75%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's

Average Overnight Parking Stress

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	12	3	78%
Cedar Road	-	-	-	-	19	17	2	88%
Christchurch Avenue	-	-	-	-	24	17	7	72%
Elmfield Avenue	44	30	15	67%	-	-	-	-
Station Road	-	-	-	-	8	6	2	71%
Waldergrave Road	-	-	-	-	27	19	8	70%
Total	44	30	15	67%	93	70	23	76%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's

APPENDIX F
Daytime Parking Survey Results

P2057 - 8a -10a High Street, Teddington Parking Daytime Stress Survey
Morning Peak Period

Daytime Parking Survey: Thursday 17th January 2019 at 07:30

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	12	3	80%
Cedar Road	-	-	-	-	19	19	0	100%
Christchurch Avenue	-	-	-	-	24	14	10	58%
Elmfield Avenue	44	44	0	100%	-	-	-	-
Station Road	-	-	-	-	8	2	6	25%
Waldergrave Road	-	-	-	-	27	19	8	70%
Total	44	44	0	100%	93	66	27	71%

Source: PMA Survey
Note: Some arithmetic errors due to rounding's

Daytime Parking Survey: Thursday 17th January 2019 at 08:00

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	10	5	67%
Cedar Road	-	-	-	-	19	17	2	89%
Christchurch Avenue	-	-	-	-	24	15	9	63%
Elmfield Avenue	44	50	-6	114%	-	-	-	-
Station Road	-	-	-	-	8	3	5	38%
Waldergrave Road	-	-	-	-	27	21	6	78%
Total	44	50	-6	114%	93	66	27	71%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's

Daytime Parking Survey: Thursday 17th January 2019 at 08:30

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	9	6	60%
Cedar Road	-	-	-	-	19	17	2	89%
Christchurch Avenue	-	-	-	-	24	12	12	50%
Elmfield Avenue	44	51	-7	116%	-	-	-	-
Station Road	-	-	-	-	8	3	5	38%
Waldergrave Road	-	-	-	-	27	21	6	78%
Total	44	51	-7	116%	93	62	31	67%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's

Daytime Parking Survey: Thursday 17th January 2019 at 09:00

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	10	5	67%
Cedar Road	-	-	-	-	19	17	2	89%
Christchurch Avenue	-	-	-	-	24	14	10	58%
Elmfield Avenue	44	51	-7	116%	-	-	-	-
Station Road	-	-	-	-	8	4	4	50%
Waldergrave Road	-	-	-	-	27	20	7	74%
Total	44	51	-7	116%	93	65	28	70%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's

Afternoon Peak Period

Daytime Parking Survey: Thursday 17th January 2019 at 15:00

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	13	2	87%
Cedar Road	-	-	-	-	19	17	2	89%
Christchurch Avenue	-	-	-	-	24	11	13	46%
Elmfield Avenue	44	51	-7	116%	-	-	-	-
Station Road	-	-	-	-	8	7	1	88%
Waldergrave Road	-	-	-	-	27	13	14	48%
Total	44	51	-7	116%	93	61	32	66%

Source: PMA Survey

Daytime Parking Survey: Thursday 17th January 2019 at 15:30

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	13	2	87%
Cedar Road	-	-	-	-	19	17	2	89%
Christchurch Avenue	-	-	-	-	24	12	12	50%
Elmfield Avenue	44	51	-7	116%	-	-	-	-
Station Road	-	-	-	-	8	7	1	88%
Waldergrave Road	-	-	-	-	27	14	13	52%
Total	44	51	-7	116%	93	63	30	68%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's

Daytime Parking Survey: Thursday 17th January 2019 at 16:00

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	13	2	87%
Cedar Road	-	-	-	-	19	18	1	95%
Christchurch Avenue	-	-	-	-	24	13	11	54%
Elmfield Avenue	44	50	-6	114%	-	-	-	-
Station Road	-	-	-	-	8	7	1	88%
Waldergrave Road	-	-	-	-	27	19	8	70%
Total	44	50	-6	114%	93	70	23	75%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's

Daytime Parking Survey: Thursday 17th January 2019 at 16:30

Road	Unrestricted Kerb-side				PHO T			
	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress	Total Parking Spaces	Number of Cars parked	Number of Free Spaces	Parking Stress
Bridgeman Road	-	-	-	-	15	13	2	87%
Cedar Road	-	-	-	-	19	17	2	89%
Christchurch Avenue	-	-	-	-	24	12	12	50%
Elmfield Avenue	44	49	-5	111%	-	-	-	-
Station Road	-	-	-	-	8	7	1	88%
Waldergrave Road	-	-	-	-	27	19	8	70%
Total	44	49	-5	111%	93	68	25	73%

Source: PMA Survey

Note: Some arithmetic errors due to rounding's