

'optimising development potential'

THATCHERS CLOSE LOUGHTON, ESSEX

Transport Statement

Project No. 15-044 October 2015

THATCHERS CLOSE LOUGHTON, ESSEX

Transport Statement

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Transport Statement

October	20	15
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Drawing 15-044-016 - Lambeth Survey - Unrestricted On-street Parking

APPENDICES

Appendix A - Masterplan

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1.0 INTRODUCTION

1.1 C & A Consulting Engineers have been commissioned by Epping Forest District Council (EFDC) to provide transport and highways advice for the Thatchers Close site, Loughton in Essex. The site location is shown in red in **Figure 1** below.

Figure 1 – Site Location



- 1.2 The site is currently the location of an informal parking area with capacity for 4-6 vehicles, which is associated with the surrounding dwellings. EFDC are proposing to redevelop the site for residential use.
- 1.3 Following a consultation response from the Highway Authority Essex County Council (ECC) as part of a previous application, ECC raised concerns regarding the loss of parking arising from the redevelopment of the site. Therefore EFDC have commissioned C & A Consulting Engineers to provide a Transport Statement in support of the application that considers the likely implications of the proposed scheme in terms of highways and transportation.

- 1.4 This review includes the following sections:
 - Section 2 provides an overview of relevant National and Local Policy;
 - Section 3 reviews the existing situation of the site, related to highways and transport conditions;
 - Section 4 sets out the development proposals, considering access, visibility and parking numbers.
 - Section 5 provides a summary of the likely impact of the development on existing parking situation on the surrounding roads, using the Lambeth Parking Survey methodology, and reviews the likely on-street parking capacity once the development is in place;
 - Section 6 summarises the finding of this report and provides a conclusion.

2.0 POLICY

National Policy

- 2.1 The national planning policy in respect to transport can be found within The National Planning Policy Framework (NPPF). This focuses on sustainability and encouraging sustainable transport solutions.
- 2.2 Paragraph 32 of the NPPF gives reference to Transport Statements and the decisions taken from them. "All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. 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 the people;
 and
 - improvements can be undertaken within the transport network that
 cost effectively limit 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."
- 2.3 The NPPF is supported by Planning Practice Guidance including guidance on the preparation of Transport Statements.
- 2.4 In addition to this, Manual for Streets (MfS) produced by the Department for Transport in 2007, is a document to be used for the design, construction, adoption and maintenance of new residential streets.
- 2.5 Within MfS Chapter 7, it details the visibility requirements for junctions. In addition to this, MfS section 6.6 discusses how highway design should cater for emergency and service vehicles.

Regional Policy

- 2.6 The Essex Local Transport plan, which comprises two parts; the Essex Transport Strategy and the Implementation Plan, are the prevailing documents for transport policy in Essex.
- 2.7 The Transport Strategy sets out the vision for transport and the outcomes that Essex aim to achieve over a fifteen year period along with the policies and broad approach to implementing them. The implementation Plan sets out in greater detail how the outcomes of the strategy will be delivered and monitored, highlighting the priorities for investment in the short-term. The Implementation Plan is to be refreshed every three years and be supported by a three year rolling investment programme.
- 2.8 Supplementary planning guidance is also provided and this includes the 2009 ECC Revised Vehicle Parking Standards. This document sets out guidance on the level of parking to be provided at new development as well as advice on layout and space sizes.

Local Policy

- 2.9 The adopted Epping Forest District Council 2006 Local Plan Alterations Document provides the planning context for the local area. Together with the relevant supplementary planning documents this covers, amongst other things, the transport policy for the Epping Forest area in which the site is located.
- 2.10 EFDC adopted the ECC Parking Standards within the Local Plan in April 2010.

3.0 EXISTING SITUATION

- 3.1 The proposed redevelopment site is located at the end of Thatchers Close, Loughton, as shown on **Figure 1** of this report.
- 3.2 The site is made up of an informal parking area, associated with the surrounding dwellings within Thatchers Close, which is a short Cul-de-Sac off Mannock Drive. To the north Mannock Drive forms a priority junction with Goldingham Avenue and connects to Burney Drive and Willingale Road to the south.
- 3.3 From the point of access onto Thatchers Close, the site's location offers good pedestrian and vehicular links to local facilities. Along Thatchers Close and then Mannock Drive there is good pedestrian infrastructure with wide, well-lit footways that link on either side of the carriageway, which connect to the wider pedestrian network on the adjacent roads including Goldingham Avenue and Willingale Road.
- 3.4 This connects the site to the retail and convenience stores located some 950m away on Pyrles Lane. The parade of shops include a food store, newsagents, pharmacy and takeaway. Debden Broadway is located approximately 1km to the south, via Willingale Road with further retail facilities available there.
- 3.5 Walking north along Mannock Drive gives quick and safe pedestrian access to open space at Jessels Green and similarly to the south at Burney Drive via Mannock Drive.
- 3.6 Mannock Drive is approximately 6m in width, and connects to the wider highway network of Rectory Lane (via Westhall Road) and the A121, which provide convenient vehicular links to Debden and Loughton centres and access to the M25 London Orbital Motorway and the M11 heading into London to the south and north towards Cambridge.

- 3.7 Bus stops are located on Burney Drive, some 400m from the site access. These stops are served by routes 20, 167 and 804. The no. 20 service runs four times per hour in both directions between Debden Broadway and Walthamstow Central. Other services link the site to Hainault Street and schools in the local area.
- 3.8 These bus services provide easy access to Debden London Underground Central line Station, which is less than 1.6km from the site. This provides frequent services to central London and key stations within Essex.

4.0 PROPOSED DEVELOPMENT

4.1 The proposed development consists of the removal of an informal parking area and the provision of a 1 two bedroom affordable dwelling. The proposed layout of the site is shown on the Masterplan attached in **Appendix A**.

Access

- 4.2 Access will be taken directly onto Thatcher's Close, which then leads onto a simple priority junction onto Mannock Drive.
- 4.3 Visibility at the access road junction with Mannock Drive is shown on **Drawing 15-044-043.** This shows that adequate visibility of 2.4m x 43m can be achieved, as per the design standard for a road with a 30mph speed limit.

Parking

- 4.4 It is proposed to provide 2 parking spaces within the development, as shown on the Masterplan in **Appendix A**. This level of parking is consistent with the 'Parking Standards, Design and Good Practice' guidance produced by ECC in 2009.
- 4.5 These parking spaces are 5m x 2.5m as is consistent with the minimum parking bay size required within the ECC guidance. **Drawing 15-044-043** also provides vehicle TRACK plots for a large car manoeuvring into and out of the parking spaces. This shows that all of the parking spaces can be adequately accessed by a large car.

Refuse

4.6 The proposed development will front directly onto the existing adopted road of Thatcher's Close, so kerbside refuse collection will be acceptable and has been agreed in writing with EFDC and information on this will be provided by Pellings within the application material.

5 Impact Assessment

Trip Generation

- 5.1 Given the size of the development and the affordable nature of the future use, the trip generation associated with the development is likely to be low. A review of the TRICS database for affordable / local authority dwellings based in England provides a selection of 8 sites and an overall two way trip rate of 0.391 in the AM peak hour and 0.430 in the PM peak hour. The TRICS output data is provided in **Appendix B**.
- 5.2 Based on the TRICS trip rate, this equates to 1 trip being generated by the development in the AM peak and in the PM peak. The addition of 1 vehicular trip on to the surrounding network will not impact on the capacity or safety of the network or the existing junctions.

Parking Demand

- 5.3 Following a consultation response from the Highway Authority, Essex County Council (ECC), as part of a previous application for a similar development, ECC raised concerns regarding the loss of parking associated with the redevelopment of the site and the subsequent risk that any existing parking associated with the garages could potentially be displaced onto the surrounding roads.
- 5.4 Therefore, in order to respond to this concern C & A Consulting Engineers have reviewed the likely use of the parking area that will be removed, including completing a two day parking survey, using the Lambeth survey methodology of the on-street parking in the immediate area. This was undertaken to gain an understanding of the existing parking demand and capacity.
- 5.5 The parking survey was completed overnight between the period of 02.30am to 03.30am on two consecutive dates of the 24rd and 25th September

2015. The survey recorded the available unrestricted on-street parking available within 200m of the site. This area is shown on **Drawing 15-044-016.**

Lambeth Survey Methodology

- 5.6 The number of vehicles that can park within the study area was calculated on the basis of the Lambeth Survey Methodology. The Lambeth Survey methodology defines the parking stress by taking the number of vehicles parked on a street or in an area in relation to the amount of parking that could reasonably be considered to be available.
- 5.7 The Lambeth method is generally used in an area of high parking stress where this can affect Highway safety, the free-flow of traffic, access by emergency services, refuse collection and delivery of goods and to assess this against the potential impact of an increase in demand through development nearby.
- 5.8 The Lambeth method stipulates that surveys should be conducted between 12.30am and 5.30am on two separate weekday nights, in order to best assess the parking demand from residents only.
- 5.9 The potential total availability of parking is derived through a simple method that measures the length of kerb available for on-street car parking, then divided by 5m, to give a value of car parking capacity for each road. The total number of vehicles actually parked along each road is then divided by the capacity to give a parking stress factor as a percentage.
- 5.10 A summary of the findings of the survey is set out in **Tables 1 & 2** below:

Table 1 - Night 1 Lambeth Parking Survey

STREET NAME	Length of unrestricted parking (m)	No of unrestricted parking spaces	No of cars parked in unrestricted parking	unrestricted parking stress (%)
Thatchers Close	120	24	9	38%

STREET NAME	Length of unrestricted parking (m)	No of unrestricted parking spaces	No of cars parked in unrestricted parking	unrestricted parking stress (%)
Mannock Drive	225	45	28	62%



TOTAL	TOTAL	TOTAL
UNRESTRICTED	UNRESTRICTED	UNRESTRICTED
SPACES	PARKED	STRESS %
69	37	54%

Table 2 - Night 2 Lambeth Parking Survey

STREET NAME	Length of unrestricted parking (m)	No of unrestricted parking spaces	No of cars parked in unrestricted parking	unrestricted parking stress (%)
Thatchers Close	120	24	8	33%

STREET NAME	Length of unrestricted parking (m)	No of unrestricted parking spaces	No of cars parked in unrestricted parking	unrestricted parking stress (%)
Mannock Drive	225	45	30	67%



TOTAL UNRESTRICTED	TOTAL UNRESTRICTED	TOTAL UNRESTRICTED
SPACES	PARKED	STRESS %
69	38	55%

5.11 It can be seen from the parking survey that the existing parking stress for the on-street parking on the surrounding roads is low, with a total parking stress for the combined area of 55% recorded on the second night of the survey.

Development Impact

- 5.12 The proposed development will provide 2 parking spaces within the scheme. Although this will also create capacity for two on-street spaces for visitors.
- 5.13 A review of the car ownership data for the area from the 2001 Census indicates an average car ownership per dwelling is 1.5. This parking provision will therefore be sufficient to accommodate the parking demand from the development based on current car ownership statistics and the parking guidelines set out by ECC. There will, therefore not be any additional on-street parking demand from the future residents of the development.
- 5.14 On both nights of the survey, there were no vehicles parked in the existing parking area proposed for development. The parking demands for the existing residents is therefore met without the use if this parking area. Given that the site was not used for parking and that parking stress on the surrounding roads is low, it is believed that there will be no impact on the local parking capacity as a result of this development.

6 SUMMARY AND CONCLUSION

- 6.1 C & A Consulting Engineers have been commissioned by Epping Forest District Council (EFDC) to provide transport and highways advice for the Thatchers Close site, Loughton in Essex.
- 6.2 The proposed development consists of the removal of an informal parking area with capacity for 4-6 vehicles and the provision of 1 two bedroom affordable dwelling. The proposed layout of the site is shown on the Masterplan attached in **Appendix A**.
- 6.3 Along Thatchers Close and Mannock Drive there is good pedestrian infrastructure with wide, well-lit footways that link to the wider pedestrian / cycle network and provide safe routes to a range of facilitates including the retail and convenience stores located on Pyrles Lane and Debden Broadway and bus stops on Hanson Drive. Nearby bus services and the London Underground Central Line station also provide good quality links to central London and key destinations in the surrounding area.
- 6.4 Access will be taken onto the end of the cul-de-sac of Thatchers Close. The development will provide 2 allocated parking spaces, meeting with ECC parking guidance.
- 6.5 Given the size of the development and the affordable nature of the future use, the trip generation associated with the development is likely to be low. A review of the TRICS database for affordable / local authority dwellings based in central England provides a selection of 8 sites and an overall two way trip rate of 0.391 in the AM peak hour and 0.430 in the PM peak hour or the equivalent of 1 vehicle trip in the peak hours. This level of trip generation will not impact on the capacity or safety of the surrounding highway network.
- 6.6 Following a consultation response from the Highway Authority Essex County Council (ECC) as part of a previous application, ECC raised concerns regarding the loss of parking associated with the redevelopment of the site and the risk that any parking associated with the garages would be displaced

(13)

onto the surrounding roads, potentially causing a severe impact on car parking stress.

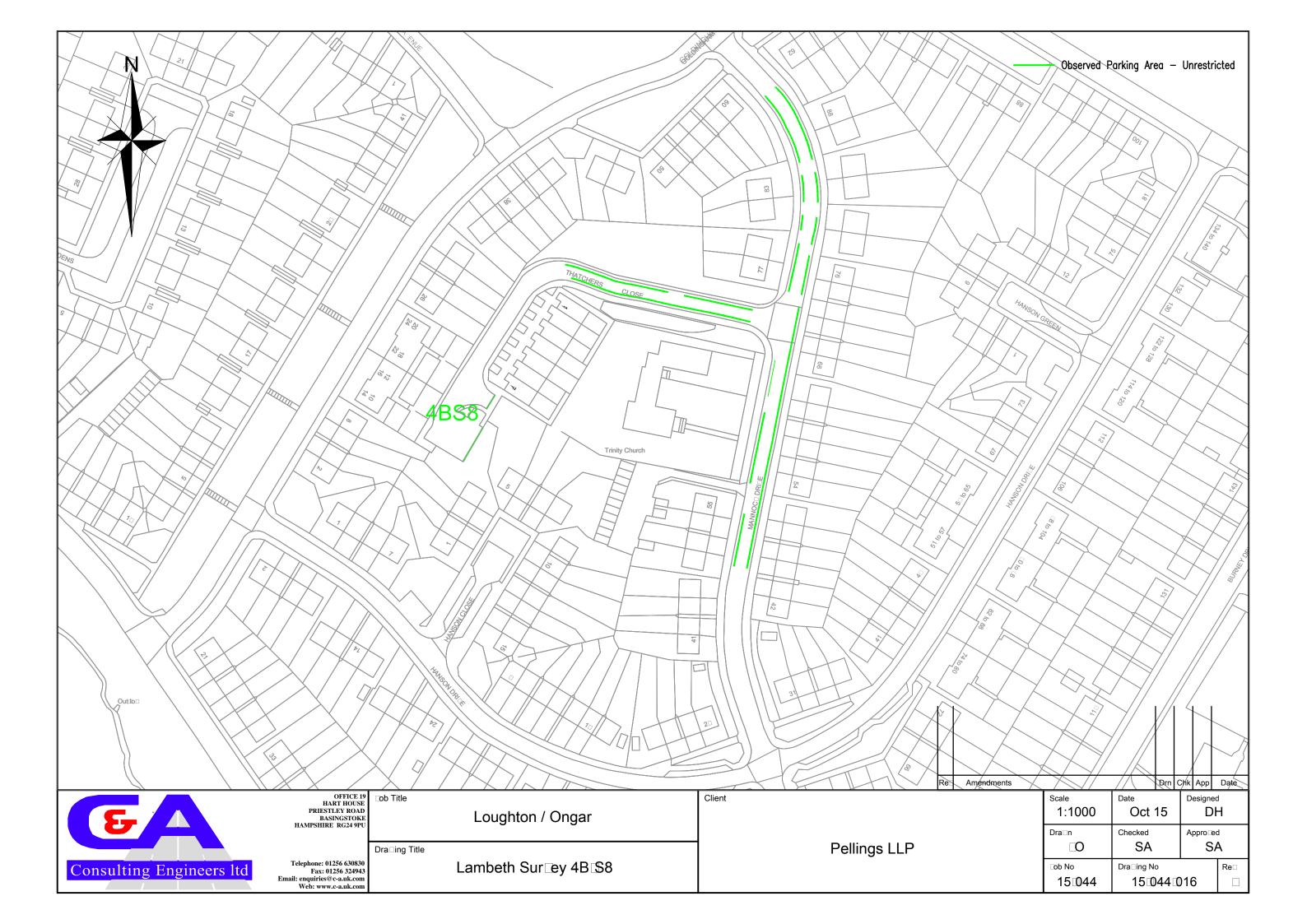
- 6.7 The parking survey was completed over night between the period of 02.30am to 03.30am on 2 days consecutive dates on the early mornings of the 24rd and 25th September 2015. This survey indicated that there was little parking stress on the surrounding roads, with a total parking stress of 55% recorded.
- 6.8 There were no vehicles observed parking in the area for development on either night of the survey. The parking demands for the existing residents is therefore met without the use if this parking area. Given that the site was not used for parking and that parking stress on the surrounding roads is low, it is believed that there will be no impact on the local parking capacity as a result of this development.
- 6.9 Any new parking demand from the proposed development will be met within the development through the provision of 2 parking spaces.

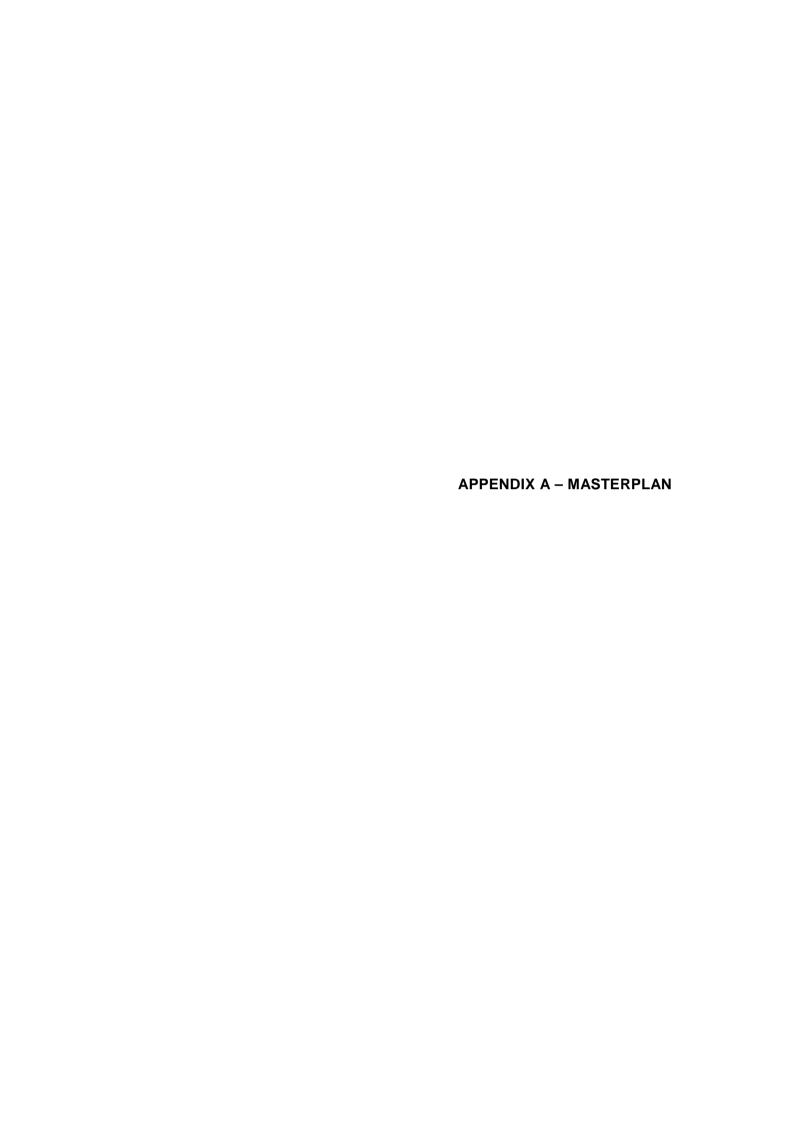
Conclusion

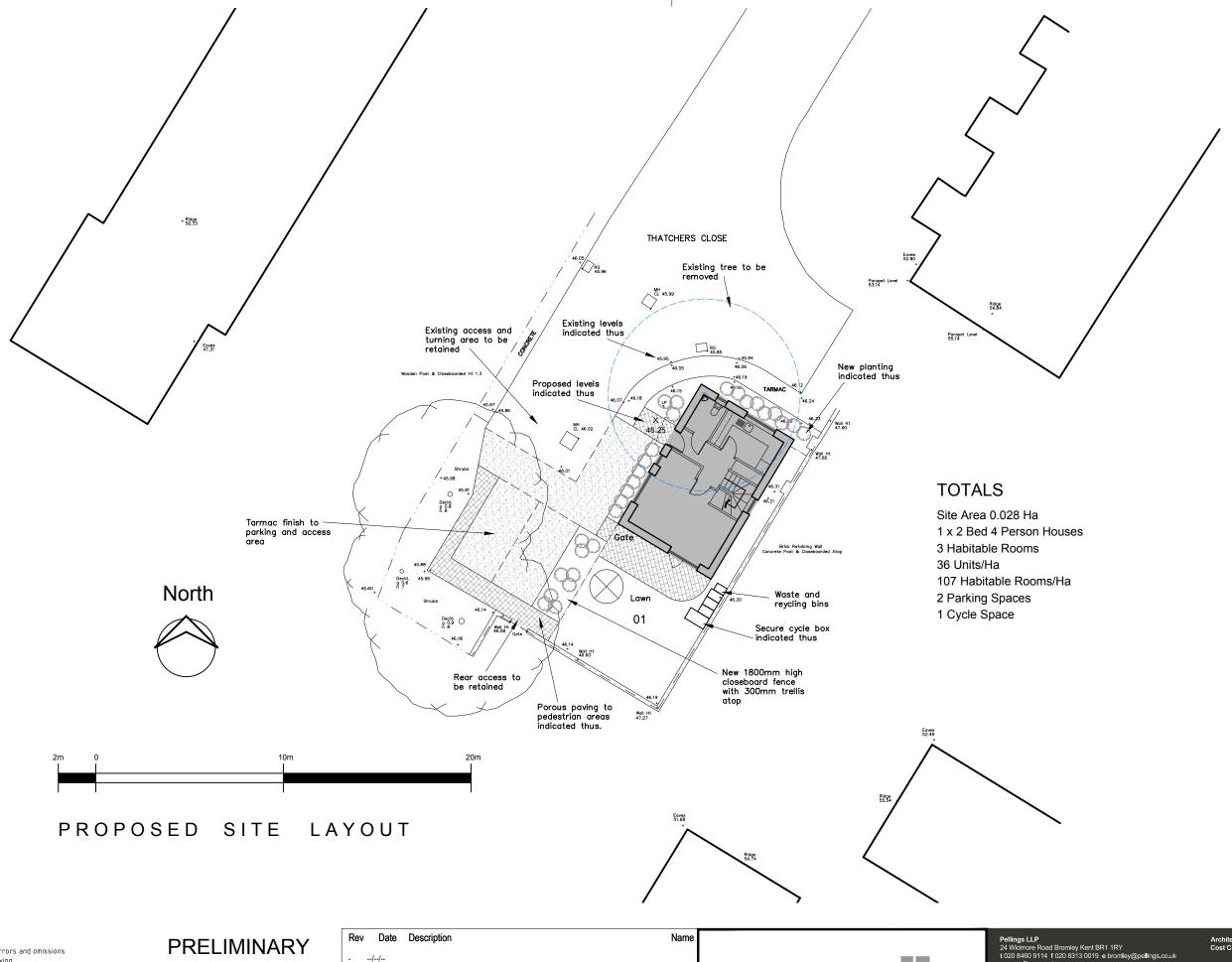
6.10 The proposed development is well located in terms of existing facilities and access to sustainable modes of travel. The development meets with ECC parking guidelines and on street parking surveys indicate that the development will not have a negative impact on the parking situation within the surrounding roads. There are therefore no highways and transport reasons for refusal.

DRAWINGS









NOTES:

Report all discrepancies, errors and omissions Do not scale from this drawing.

Verify all dimensions on site before commencing any work or

preparing shop drawings.

All materials, components and workmanship are to comply with all the relevant British Standards, Codes of Practice, and appropriate manufacturers recommendations that from time to

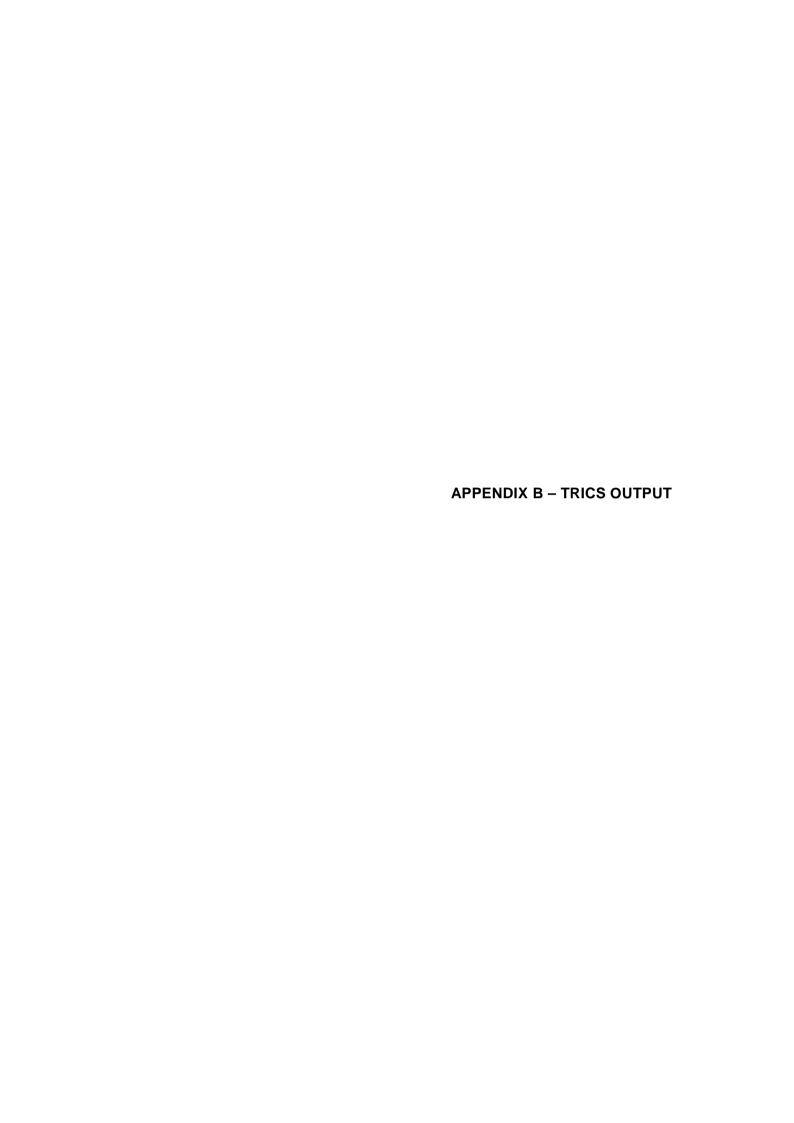
time shall apply. For all specialist work, see relevant drawings.

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24 Widmore Road Bromley Kent BR1 1RY
1 020 8460 9114 f 020 8313 0019 e bromley@pellings.co.uk EFDC House Building Programme East Thames HA SCALE 1:200 @A3 DRAWN NP AUG 2015 Proposed Site Layout Thatchers Close, Loughton 612|063|PL03



C & A Consulting Engineers Bradbourne Vale Road Licence No: 657801

Calculation Reference: AUDIT-657801-151012-1052

TRIP RATE CALCULATION SELECTION PARAMETERS:

: 03 - RESIDENTIAL Land Use

: B - AFFORDABLE/LOCAL AUTHORITY HOUSES Category

VEHIČLES

NB

Selected regions and areas:

EAST MIDLANDS **DERBYSHIRE** 1 days 06 **WEST MIDLANDS** WM WEST MIDLANDS 1 days 07 YORKSHIRE & NORTH LINCOLNSHIRE NORTH YORKSHIRE 1 days WY WEST YORKSHIRE 2 days 80 NORTH WEST LC LANCASHIRE 1 days MS **MERSEYSIDE** 1 days 09 **NORTH**

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

1 days

Parameter: Number of dwellings Actual Range: 15 to 280 (units:) Range Selected by User: 14 to 280 (units:)

NORTHUMBERLAND

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 to 19/09/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday 4 days Tuesday 2 days Thursday 2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 8 days **Directional ATC Count** 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre 1 Suburban Area (PPS6 Out of Centre) 3 Edge of Town

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	6
Built-Up Zone	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Pesidential Zone, Petail Zone, Ruilt-Un Zone, Village, Out

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			Page 2
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Filtering Stage 3 selection:

Use Class:

7 days C3

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
75,001 to 100,000	2 days
125,001 to 250,000	2 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

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LIST OF SITES relevant to selection parameters

1 DS-03-B-01 TERRACED/SEMI/BUNG. DERBYSHIRE

COCKAYNE STREET

BOULTON DERBY

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 29

Survey date: MONDAY 04/07/11 Survey Type: MANUAL

2 LC-03-B-02 SEMI DETACHED/TERRACED LANCASHIRE

BILLINGE STREET

BLACKBURN

Edge of Town Centre Residential Zone

Total Number of dwellings: 15

Survey date: MONDAY 10/06/13 Survey Type: MANUAL

3 MS-03-B-01 TERRACED MERSEYSIDE

TARBOCK ROAD

SPEKE LIVERPOOL Edge of Town Residential Zone

Total Number of dwellings: 16

Survey date: TUESDAY 18/06/13 Survey Type: MANUAL
4 NB-03-B-01 SEMI DET. & TERRACED NORTHUMBERLAND

WESTLEA

BEDLINGTON Edge of Town Residential Zone

Total Number of dwellings: 97

Survey date: MONDAY 19/11/12 Survey Type: MANUAL NY-03-B-01 TERRACED HOUSING NORTH YORKSHIRE

NORTHALLERTON ROAD

NORBY THIRSK

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total Number of dwellings: 280

Survey date: THURSDAY 20/09/07 Survey Type: MANUAL WM-03-B-01 SEMI DET./TERRACED WEST MIDLANDS

YORKMINSTER DRIVE CHELMSLEY WOOD BIRMINGHAM Edge of Town

Residential Zone

Total Number of dwellings: 97

Survey date: MONDAY 17/10/11 Survey Type: MANUAL WY-03-B-02 MIXED HOUSES WEST YORKSHIRE

WHITEACRE STREET

DEIGHTON HUDDERSFIELD Edge of Town Residential Zone

Total Number of dwellings: 54

Survey date: TUESDAY 17/09/13 Survey Type: MANUAL

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LIST OF SITES relevant to selection parameters (Cont.)

8 WY-03-B-03 TERRACED HOUSES WEST YORKSHIRE LINCOLN GREEN ROAD

LEEDS (PDS) O L

Suburban Area (PPS6 Out of Centre)

Built-Up Zone

Total Number of dwellings: 29

Survey date: THÜRSDAY 19/09/13 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

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Licence No: 657801

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

VEHICLES

Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00	·			-			-		
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	77	0.063	8	77	0.167	8	77	0.230
08:00 - 09:00	8	77	0.138	8	77	0.253	8	77	0.391
09:00 - 10:00	8	77	0.118	8	77	0.136	8	77	0.254
10:00 - 11:00	8	77	0.126	8	77	0.143	8	77	0.269
11:00 - 12:00	8	77	0.139	8	77	0.146	8	77	0.285
12:00 - 13:00	8	77	0.130	8	77	0.130	8	77	0.260
13:00 - 14:00	8	77	0.146	8	77	0.113	8	77	0.259
14:00 - 15:00	8	77	0.151	8	77	0.167	8	77	0.318
15:00 - 16:00	8	77	0.186	8	77	0.139	8	77	0.325
16:00 - 17:00	8	77	0.201	8	77	0.143	8	77	0.344
17:00 - 18:00	8	77	0.248	8	77	0.182	8	77	0.430
18:00 - 19:00	8	77	0.169	8	77	0.122	8	77	0.291
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.841			3.656			

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 15 - 280 (units:)
Survey date date range: 01/01/07 - 19/09/13

Number of weekdays (Monday-Friday): 8
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.