



# Transport Statement

Land at Whitehills Road, Loughton

21-007-001 Rev -  
February 2021



Charles & Associates

# Document Control Sheet

|                 |                                   |
|-----------------|-----------------------------------|
| Project Name:   | Land at Whitehills Road, Loughton |
| Project Number: | 21-007                            |
| Report Title:   | Transport Statement               |
| Report Number:  | 001                               |

| Rev | Issue Purpose | Author | Checked | Reviewed | Approved | Date     |
|-----|---------------|--------|---------|----------|----------|----------|
| -   | Issue         | CG     | CG      |          |          | 12/02/21 |
|     |               |        |         |          |          |          |
|     |               |        |         |          |          |          |
|     |               |        |         |          |          |          |
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# 1 Introduction

## 1.1 Introduction

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

**Figure 1: Site Location**



- 1.1.2 The site is currently the location of 26 garages, originally associated with the surrounding dwellings. EFDC are proposing to redevelop the site for residential use.
- 1.1.3 The site was granted planning permission for a similar scheme (ref EPF/1759/16) in 2016 although this permission has now lapsed.
- 1.1.4 Essex County Council (ECC) previously raised concerns regarding the loss of parking arising from the redevelopment of the site and so this report includes a 'Lambeth methodology' parking survey.
- 1.1.5 This report 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 Policy

### 2.1 National Policy

2.1.1 The National Planning Policy Framework (NPPF) focuses on sustainability and encouraging sustainable transport solutions.

2.1.2 Paragraph 108 of the NPPF states:

*In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

*a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*

*b) safe and suitable access to the site can be achieved for all users; and*

*c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*

2.1.3 The NPPF is supported by Planning Practice Guidance including guidance on the preparation of Transport Statements.

2.1.4 In addition, Manual for Streets (MfS) covers the design, construction, adoption and maintenance of new residential streets. MfS Chapter 7 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.

### 2.2 Regional Policy

2.2.1 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.

2.2.2 The Transport Strategy sets out the vision for transport over a 15-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, and this is refreshed every three years.

2.2.3 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.

## 2.3 Local Policy

- 2.3.1 The adopted Epping Forest District Council 2006 Local Plan Alterations Document provides the planning context for the local area.
- 2.3.2 EFDC adopted the ECC Parking Standards within the Local Plan in April 2010.



### 3 Existing Conditions

#### 3.1 Site Location

- 3.1.1 The proposed redevelopment site is located on the western end of Whitehills Road, Buckhurst Hill, as shown on **Figure 1** of this report.
- 3.1.2 The site contains 26 garages, originally associated with the surrounding dwellings. The site currently takes access onto Whitehills Road. To the east, Whitehills Road connects to Newmans Lane and to the north west connects to Church lane.
- 3.1.3 From the point of access onto Whitehills Road, the site's location offers good pedestrian and vehicular links to local facilities. Along Whitehills Road there is good pedestrian infrastructure with wide, well-lit footways on either side of the carriageway. These connect to the wider pedestrian network on the adjacent roads, including Newmans Lane and Church Lane.
- 3.1.4 The network provides safe pedestrian routes to the shopping parade on Borders Lane some 500m from the site with a newsagent, foodstore and takeaway. Oak View School is immediately to the south of the site, and is accessible by safe, lit pedestrian footways.
- 3.1.5 Yellow keep clear markings are present on Whitehills Road to the south of the site access, to prevent parking close to the school. A white lined access protection marking is present across the existing site access, to ensure vehicles do not block the access road.
- 3.1.6 Whitehills Road is approximately 6m in width and connects to the wider highway network of Rectory Lane 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.

#### 3.2 Public Transport

- 3.2.1 The closest bus stops are on Newmans Lane some 400m from the site access. These are served by route 418, which runs from Loughton to Epping. The stops on Borders Lane, some 500m from the site access, are served by routes 66 and 397. These run to Waltham Cross and Chingford respectively, both running every 30 minutes.
- 3.2.2 Debden Station, on the London Underground Central line, is around 1.5km walking distance from the site and is accessible by safe, lit pedestrian routes. The Central Line provides frequent services to central London and key stations within Essex.



## 4 Proposed Development

### 4.1 Overview

- 4.1.1 The proposed development consists of the removal of 26 garages and the provision of 2 two-bedroom affordable dwellings. **Appendix A** shows the proposed masterplan.

### 4.2 Access

- 4.2.1 Access will be taken via the existing access road, which provides a simple priority junction onto Whitehills Road. The access road is some 2.8m wide and approximately 29m in length. The access road provides sufficient forward visibility that, on the rare occasions two vehicles try to use the access road at once, any oncoming vehicle will be able to see the other car approach and give way or reverse a short distance to allow the other car to pass, as necessary.
- 4.2.2 Visibility at the access road junction with Whitehills Road is shown on **Drawing 21-007/001**. This shows that adequate visibility of 2.4m x 43m can be achieved at the access junction, as per the design standard for a road with a 30mph speed limit.

### 4.3 Parking

- 4.3.1 The layout includes 5 unallocated parking spaces within the development, as shown in **Appendix A**. This level of parking is consistent with the 'Parking Standards, Design and Good Practice' guidance produced by ECC in 2009.
- 4.3.2 These parking spaces are 5m x 2.5m, which is the minimum parking bay size required within the ECC guidance.
- 4.3.3 The Essex Design Guide recommends that each dwelling should be fitted with a standard charging point (3-7kW).

### 4.4 Refuse

- 4.4.1 A refuse strategy was agreed for the previous application. Refuse will be collected from a defined area for refuse storage on bin day, that is located close to the site access, as shown in **Appendix A**. Refuse vehicles will not need to enter the site.

## 5 Transport Implications

### 5.1 Trip Generation

- 5.1.1 The TRICS database has been used to assess the vehicle trip generation of the proposed development.
- 5.1.2 Using sites in the Affordable/Local Authority Housing category in England, the overall two-way trip rates are 0.379 per dwelling in the AM peak hour, and 0.461 per dwelling in the PM peak hour. The full output is shown in **Appendix B**.
- 5.1.3 For the two dwellings, this equates to around 1 vehicle trip in each of the peak hours. This impact would not affect the capacity or safety of the network or the existing junctions.
- 5.1.4 Although all the 26 garages are now vacant, the theoretical trip generation of the existing site has been considered. Garages are not always used for vehicle parking, so it would be unrealistic to assume that the garages accommodate 26 cars associated with 26 individual dwellings.
- 5.1.5 There have been many studies by consultants and highway authorities on the likely use of garages and whether owners do use them for parking, or instead use the space for storage. A study by Mouchel in 2007, conducted on behalf of ECC, indicated that *'78% of garages are not used to store vehicles but used for general storage/utility uses instead'* (Mouchel Resident's Study 2007).
- 5.1.6 Therefore, assuming that 22% of the 26 garages are used for parking and that each garage is for a single dwelling, then the existing garages correspond to 6 dwellings.
- 5.1.7 Using the trip rates associated with the proposed development applied to the proxy of 6 dwellings for the existing garages, the two-way trip generation is 2 vehicle trips in the AM peak hour and 3 vehicle trips in the PM peak hour.
- 5.1.8 The proposed development is therefore considered to be a slight betterment for pedestrian/vehicle interaction for the access, as there would be a reduction of 1 vehicle trip in the morning peak and 2 in the evening peak. Whilst the reduction is relatively modest in nature, the changes to the proposed site cannot be considered to constitute a worsening of the current situation for pedestrians.

### 5.2 Parking Demand

- 5.2.1 C&A carried out 'Lambeth Methodology' parking surveys to establish the existing on-street parking demand. This stipulates that surveys should be conducted between 12.30am and 5.30am on two separate weekday nights, to best assess the parking demand from residents only.

- 5.2.2 The survey covered streets up to 200 metres from the proposed access, as shown in Drawing 21-007/002.
- 5.2.3 The potential capacity for on-street parking is derived by dividing the lengths of available kerb by 5 metres per vehicle. The total number of observed parked vehicles is then divided by the capacity to give a parking stress factor.
- 5.2.4 It should be noted that properties in the survey area predominantly have driveways and garages, so little or no on-street parking was observed.
- 5.2.5 The surveys took place on Wednesday 10 and Friday 12 February 2021 at 01:00, and the results are summarised in Table 5.1 below.

Table 5.1: Parking Survey

| Street Name                        | Length of unrestricted parking (m) | Unrestricted parking spaces | Cars parked in unrestricted spaces | Unrestricted parking stress (%) |
|------------------------------------|------------------------------------|-----------------------------|------------------------------------|---------------------------------|
| <b>Survey 1 – 10 February 2021</b> |                                    |                             |                                    |                                 |
| Church Lane                        | 70                                 | 14                          | 0                                  | 0%                              |
| Wellfields                         | 235                                | 47                          | 2                                  | 4%                              |
| Whitehills Road                    | 110                                | 22                          | 0                                  | 0%                              |
| Carroll Hill                       | 320                                | 64                          | 19                                 | 30%                             |
| Durnell Way                        | 45                                 | 9                           | 9                                  | 100%                            |
| <b>Total area</b>                  |                                    | <b>156</b>                  | <b>30</b>                          | <b>19%</b>                      |
| <b>Survey 2 – 12 February 2021</b> |                                    |                             |                                    |                                 |
| Church Lane                        | 70                                 | 14                          | 0                                  | 0%                              |
| Wellfields                         | 235                                | 47                          | 0                                  | 0%                              |
| Whitehills Road                    | 110                                | 22                          | 0                                  | 0%                              |
| Carroll Hill                       | 320                                | 64                          | 19                                 | 30%                             |
| Durnell Way                        | 45                                 | 9                           | 8                                  | 89%                             |
| <b>Total area</b>                  |                                    | <b>156</b>                  | <b>27</b>                          | <b>17%</b>                      |

- 5.2.6 The survey shows that there is low parking stress in the local area, averaging 18% across the two survey days.
- 5.2.7 The proposed development will provide 5 parking spaces within the scheme. Although this parking will be unallocated, this equates to 2.5 parking spaces per dwelling.
- 5.2.8 A review of the car ownership data for the district, from the 2011 Census, indicates the average car ownership per dwelling is 1.3. This parking provision will therefore be sufficient to accommodate the parking demand from the development, and there will not be any impact on on-street parking.

- 5.2.9 The garages on the Site are no longer rented out. However, as a theoretical worst case, some 6 vehicles could be displaced from the garages onto the surrounding roads (as around 22% of garages are used for parking).
- 5.2.10 With an additional 6 vehicles parked on street, there would be a slight increase to increase to 33-39 vehicles parked in the 156 spaces, which is a parking stress of 21-25%.

## 6 Summary and Conclusions

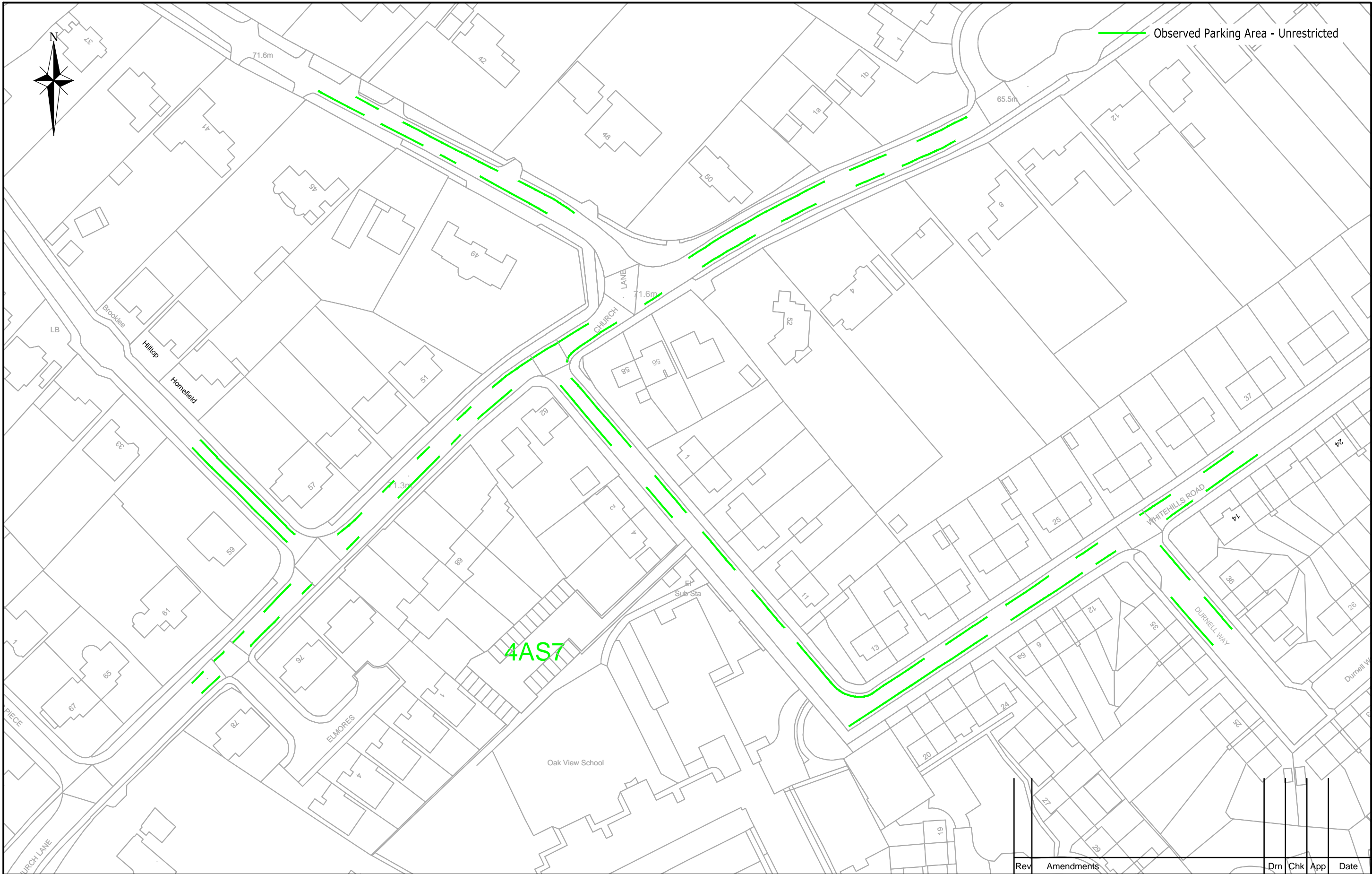
### 6.1 Summary

- 6.1.1 The proposed development at Whitehills Road, Loughton benefits from reasonable access by a range of transport modes.
- 6.1.2 The existing garages on the Site are no longer rented out and are unlikely to generate any vehicle trips in the future.
- 6.1.3 Nevertheless, the proposed development would result in a reduction in vehicle trips against the potential activity associated with the existing garages.
- 6.1.4 On-site parking will be provided in line with ECC standards.
- 6.1.5 A recent parking survey shows that in a worst-case assessment, there would be adequate on-street parking to accommodate any displaced vehicles.


### 6.2 Conclusions

- 6.2.1 The development would therefore be acceptable in transport terms.

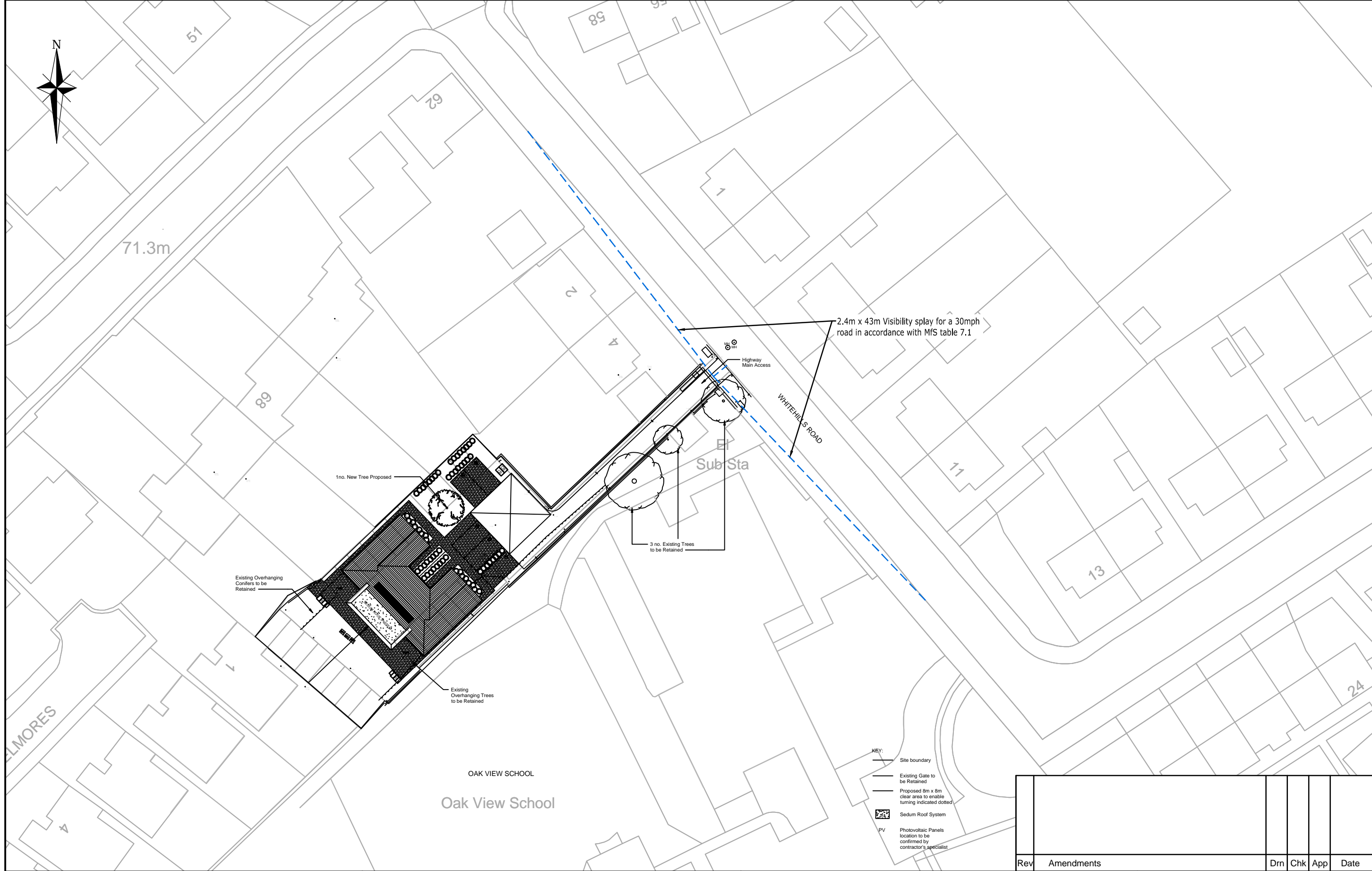
## Drawings




| Rev | Amendments | Drn | Chk | App | Date |
|-----|------------|-----|-----|-----|------|
|     |            |     |     |     |      |

|   |   |  |   |                               |                        |                         |                       |
|---|---|--|---|-------------------------------|------------------------|-------------------------|-----------------------|
|  <b>Charles &amp; Associates</b> | <input type="checkbox"/> Issued by  | <input type="checkbox"/> Landmark House<br>Station Road<br>Hook<br>Hampshire<br>RG27 9HA<br>01256 630420 | Job Title<br><b>Whitehills Road, Loughton</b> | Client<br><b>Pellings LLP</b> | Scale<br><b>1:1000</b> | Date<br><b>Feb 2021</b> | Designed<br><b>DH</b> |
|   | <input type="checkbox"/> Park House, Park Farm<br>East Malling Trust Estate<br>Bradbourne Lane<br>Aylesford Kent ME20 6SN<br>01732 448120 | Drawing Title<br><b>Lambeth Parking Survey - 4A S7</b>   | Drawn<br><b>DH</b>                            |                               | Checked                | Approved                |                       |
|   | Job No<br><b>21-007</b>   | Drawing No<br><b>21-007/001</b>  | Rev<br><b>-</b>                               |                               |                        |                         |                       |





| Rev | Amendments | Drn | Chk | App | Date |
|-----|------------|-----|-----|-----|------|
|     |            |     |     |     |      |

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☐ Issued by

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☐ Park House, Park Farm  
East Malling Trust Estate  
Bradbourne Lane  
Aylesford Kent ME20 6SN  
01732 448120

Job Title

Whitehills Road, Loughton

Drawing Title

Phase 4A Whitehills Road, Access Review

Client

Pellings LLP

Scale

1:500

Drawn

DH

Job No

21-007

Date

Feb 2021

Checked

Drawing No

21-007/002

Designed

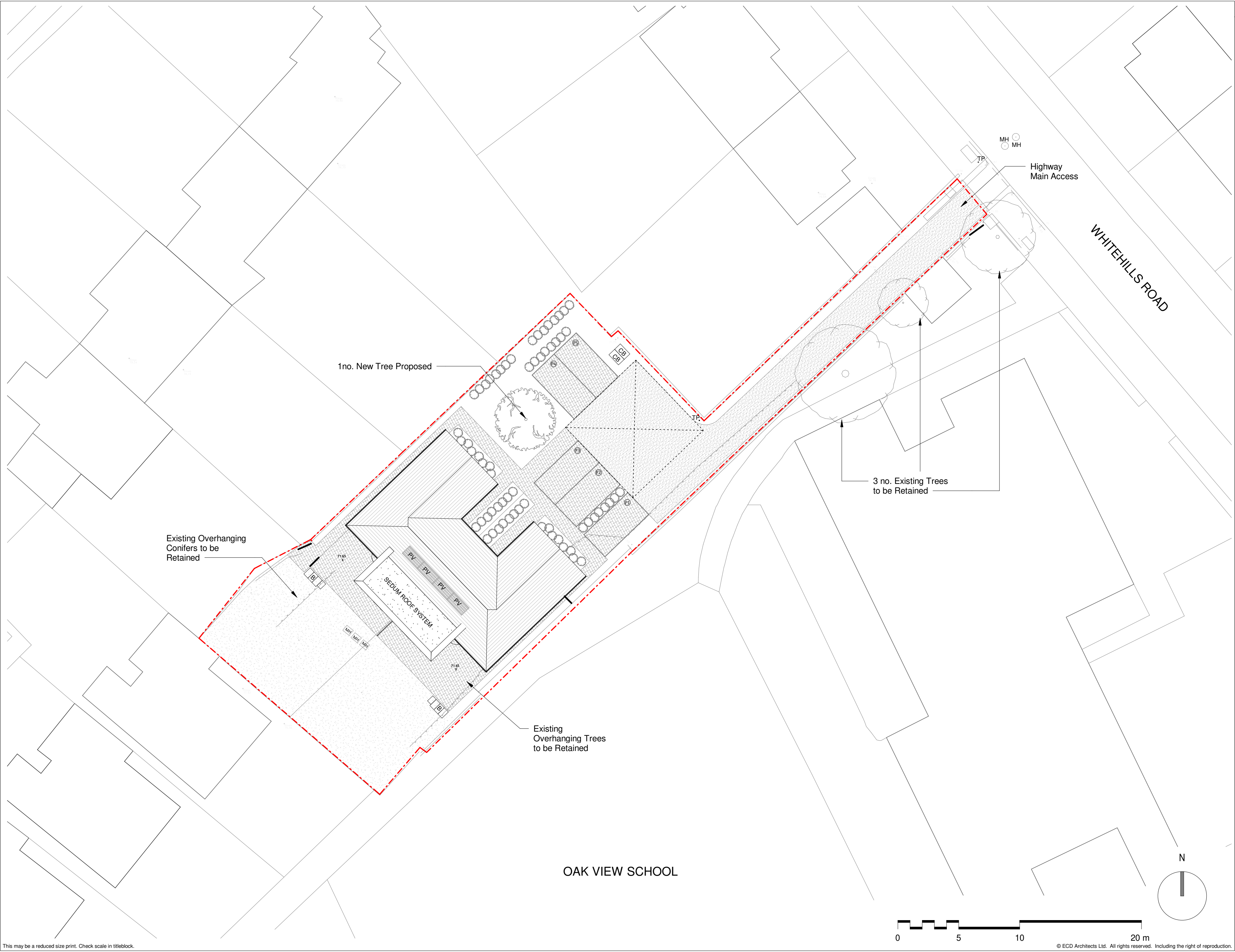
DH

Approved

Rev

-

## **Appendix A    Proposed Layout**



SHEET NOTES

1. All dimensions are indicative and they need to be checked on site by the contractor before construction proceeds and prior to the fabrication of any component.
2. This drawing is based on survey information by others.
3. All dimensions to be in millimetres unless otherwise specified.
4. All building works are to be carried out in accordance with current British/European Standards and the Building Regulations.
5. Refer to Structural Engineer's drawings, details and specifications for all structural components.
6. Refer to Mechanical & Electrical Engineer's drawings, schedules and specifications for all services.
7. This drawing is to be read in conjunction with the Design and Access Statement submitted with the planning application.
8. For occupied buildings, safe, clear access and means of escape to be maintained at all times during works in accordance with the Construction Phase Health and Safety Plan.
9. Any discrepancies between the drawings and site conditions shall be brought to the attention of the Architect/CA for resolution.

KEY:


- Site boundary
- Existing Gate to be Retained
- Proposed 8m x 8m clear area to enable turning indicated dotted
- SEDUM ROOF SYSTEM
- PV Photovoltaic Panels location to be confirmed by contractor's specialist

|    |    |    |          |              |
|----|----|----|----------|--------------|
| P1 | GS | BA | 25.01.21 | Client Issue |
|----|----|----|----------|--------------|

|          |       |         |      |             |
|----------|-------|---------|------|-------------|
| REVISION | DRAWN | CHECKED | DATE | DESCRIPTION |
|----------|-------|---------|------|-------------|

DRAWING ISSUE  
For Planning

CLIENT  
Epping Forest District Council

 **ECD Architects**  
ENERGY CONSCIOUS DESIGN

☒ Studio 3 Blue Lion Place, 237 Long Lane  
London, SE1 4PU  
☐ The Centrum Building, 38 Queen Street  
Glasgow, G1 3DX  
[www.ecda.co.uk](http://www.ecda.co.uk)

PROJECT TITLE  
EFDC House Building Programme  
Whitehills Road

DRAWING TITLE  
Proposed Site Plan

|              |         |
|--------------|---------|
| SCALE        | DRAWN   |
| 1 : 200 @ A2 | GS      |
| DATE         | CHECKED |
| 22.01.21     | BA      |

|  |        |      |
|--|--------|------|
| Project Code - Originator - Vol - Level - Type - Role - Number | Status | Rev. |
| 190057- ECD -XX-RL- DR-A-05060                                 | S3     | P1   |

## **Appendix B    TRICS Assessment**

Calculation Reference: AUDIT-657801-210203-0220

#### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES  
**TOTAL VEHICLES**

##### Selected regions and areas:

|    |                                |        |
|----|--------------------------------|--------|
| 02 | SOUTH EAST                     |        |
|    | EX ESSEX                       | 1 days |
| 03 | SOUTH WEST                     |        |
|    | WL WILTSHIRE                   | 1 days |
| 06 | WEST MIDLANDS                  |        |
|    | WO WORCESTERSHIRE              | 1 days |
| 07 | YORKSHIRE & NORTH LINCOLNSHIRE |        |
|    | WY WEST YORKSHIRE              | 1 days |
| 08 | NORTH WEST                     |        |
|    | GM GREATER MANCHESTER          | 1 days |
| 11 | SCOTLAND                       |        |
|    | DU DUNDEE CITY                 | 1 days |

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

#### Primary Filtering 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.*

Parameter: No of Dwellings  
 Actual Range: 16 to 228 (units: )  
 Range Selected by User: 11 to 30 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

##### Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/10/18

*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    | 1 days |
| Tuesday   | 1 days |
| Wednesday | 1 days |
| Thursday  | 2 days |
| Friday    | 1 days |

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

##### Selected survey types:

|                       |        |
|-----------------------|--------|
| Manual count          | 6 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 undertaken using machines.*

##### Selected Locations:

|  |   |
|--|---|
| Suburban Area (PPS6 Out of Centre)       | 4 |
| Neighbourhood Centre (PPS6 Local Centre) | 2 |

*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 | 3 |
| Built-Up Zone    | 1 |
| Village          | 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, Residential Zone, Retail Zone, Built-Up Zone, Village,*



Secondary Filtering selection:

Use Class:

|    |        |
|----|--------|
| C3 | 6 days |
|----|--------|

*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 500m Range:

All Surveys Included

Population within 1 mile:

|                  |        |
|------------------|--------|
| 1,001 to 5,000   | 1 days |
| 5,001 to 10,000  | 1 days |
| 15,001 to 20,000 | 1 days |
| 25,001 to 50,000 | 3 days |

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

Population within 5 miles:

|                    |        |
|--------------------|--------|
| 25,001 to 50,000   | 1 days |
| 50,001 to 75,000   | 1 days |
| 75,001 to 100,000  | 1 days |
| 125,001 to 250,000 | 2 days |
| 250,001 to 500,000 | 1 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 | 4 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:

|    |        |
|----|--------|
| No | 6 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.*

PTAL Rating:

|                 |        |
|-----------------|--------|
| No PTAL Present | 6 days |
|-----------------|--------|

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

|   |  |                      |                     |
|---|--|----------------------|---------------------|
| 1 | DU-03-B-01                               | TERRACED BUNGALOWS   | DUNDEE CITY         |
|   | 307-441 BALUNIE DRIVE                    |                      |                     |
|   | DUNDEE                                   |                      |                     |
|   | DOUGLAS & ANGUS                          |                      |                     |
|   | Suburban Area (PPS6 Out of Centre)       |                      |                     |
|   | Residential Zone                         |                      |                     |
|   | Total No of Dwellings:                   | 68                   |                     |
|   | Survey date: FRIDAY                      | 21/04/17             | Survey Type: MANUAL |
| 2 | EX-03-B-01                               | MIXED HOUSES & FLATS | ESSEX               |
|   | SHIMBROOKS                               |                      |                     |
|   | NEAR BRAINTREE                           |                      |                     |
|   | GREAT LEIGHS                             |                      |                     |
|   | Neighbourhood Centre (PPS6 Local Centre) |                      |                     |
|   | Village                                  |                      |                     |
|   | Total No of Dwellings:                   | 228                  |                     |
|   | Survey date: THURSDAY                    | 10/05/18             | Survey Type: MANUAL |
| 3 | GM-03-B-01                               | TERRACED HOUSES      | GREATER MANCHESTER  |
|   | NEWBOLD                                  |                      |                     |
|   | ROCHDALE                                 |                      |                     |
|   | Suburban Area (PPS6 Out of Centre)       |                      |                     |
|   | No Sub Category                          |                      |                     |
|   | Total No of Dwellings:                   | 43                   |                     |
|   | Survey date: WEDNESDAY                   | 21/10/15             | Survey Type: MANUAL |
| 4 | WL-03-B-01                               | TERRACED HOUSES      | WILTSHIRE           |
|   | BUTTERFIELD DRIVE                        |                      |                     |
|   | AMESBURY                                 |                      |                     |
|   | Suburban Area (PPS6 Out of Centre)       |                      |                     |
|   | Residential Zone                         |                      |                     |
|   | Total No of Dwellings:                   | 54                   |                     |
|   | Survey date: TUESDAY                     | 18/09/18             | Survey Type: MANUAL |
| 5 | WO-03-B-02                               | TERRACED HOUSES      | WORCESTERSHIRE      |
|   | GOODREST WALK                            |                      |                     |
|   | WORCESTER                                |                      |                     |
|   | MERRIMANS HILL                           |                      |                     |
|   | Neighbourhood Centre (PPS6 Local Centre) |                      |                     |
|   | Residential Zone                         |                      |                     |
|   | Total No of Dwellings:                   | 16                   |                     |
|   | Survey date: MONDAY                      | 14/11/16             | Survey Type: MANUAL |
| 6 | WY-03-B-03                               | TERRACED HOUSES      | WEST YORKSHIRE      |
|   | LINCOLN GREEN ROAD                       |                      |                     |
|   | LEEDS                                    |                      |                     |
|   | Suburban Area (PPS6 Out of Centre)       |                      |                     |
|   | Built-Up Zone                            |                      |                     |
|   | Total No of Dwellings:                   | 29                   |                     |
|   | Survey date: THURSDAY                    | 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.



TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES  
**TOTAL VEHICLES**  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

| Time Range          | ARRIVALS |             |              | DEPARTURES |             |              | TOTALS   |             |              |
|---------------------|----------|-------------|--------------|------------|-------------|--------------|----------|-------------|--------------|
|                     | No. Days | Ave. DWELLS | Trip Rate    | No. Days   | Ave. DWELLS | Trip Rate    | No. Days | Ave. DWELLS | Trip 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       | 6        | 73          | 0.068        | 6          | 73          | 0.189        | 6        | 73          | 0.257        |
| 08:00 - 09:00       | 6        | 73          | 0.126        | 6          | 73          | 0.253        | 6        | 73          | 0.379        |
| 09:00 - 10:00       | 6        | 73          | 0.107        | 6          | 73          | 0.142        | 6        | 73          | 0.249        |
| 10:00 - 11:00       | 6        | 73          | 0.098        | 6          | 73          | 0.105        | 6        | 73          | 0.203        |
| 11:00 - 12:00       | 6        | 73          | 0.082        | 6          | 73          | 0.107        | 6        | 73          | 0.189        |
| 12:00 - 13:00       | 6        | 73          | 0.103        | 6          | 73          | 0.094        | 6        | 73          | 0.197        |
| 13:00 - 14:00       | 6        | 73          | 0.100        | 6          | 73          | 0.100        | 6        | 73          | 0.200        |
| 14:00 - 15:00       | 6        | 73          | 0.107        | 6          | 73          | 0.132        | 6        | 73          | 0.239        |
| 15:00 - 16:00       | 6        | 73          | 0.208        | 6          | 73          | 0.155        | 6        | 73          | 0.363        |
| 16:00 - 17:00       | 6        | 73          | 0.240        | 6          | 73          | 0.126        | 6        | 73          | 0.366        |
| 17:00 - 18:00       | 6        | 73          | 0.272        | 6          | 73          | 0.189        | 6        | 73          | 0.461        |
| 18:00 - 19:00       | 6        | 73          | 0.185        | 6          | 73          | 0.132        | 6        | 73          | 0.317        |
| 19:00 - 20:00       |          |             |              |            |             |              |          |             |              |
| 20:00 - 21:00       |          |             |              |            |             |              |          |             |              |
| 21:00 - 22:00       |          |             |              |            |             |              |          |             |              |
| 22:00 - 23:00       |          |             |              |            |             |              |          |             |              |
| 23:00 - 24:00       |          |             |              |            |             |              |          |             |              |
| <b>Total Rates:</b> |          |             | <b>1.696</b> |            |             | <b>1.724</b> |          |             | <b>3.420</b> |

*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.*

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#### Parameter summary

|   |                     |
|---|---------------------|
| Trip rate parameter range selected:           | 16 - 228 (units: )  |
| Survey date range:                            | 01/01/12 - 19/10/18 |
| Number of weekdays (Monday-Friday):           | 6                   |
| Number of Saturdays:                          | 0                   |
| Number of Sundays:                            | 0                   |
| Surveys automatically removed from selection: | 0                   |
| Surveys manually removed from selection:      | 0                   |

*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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.*