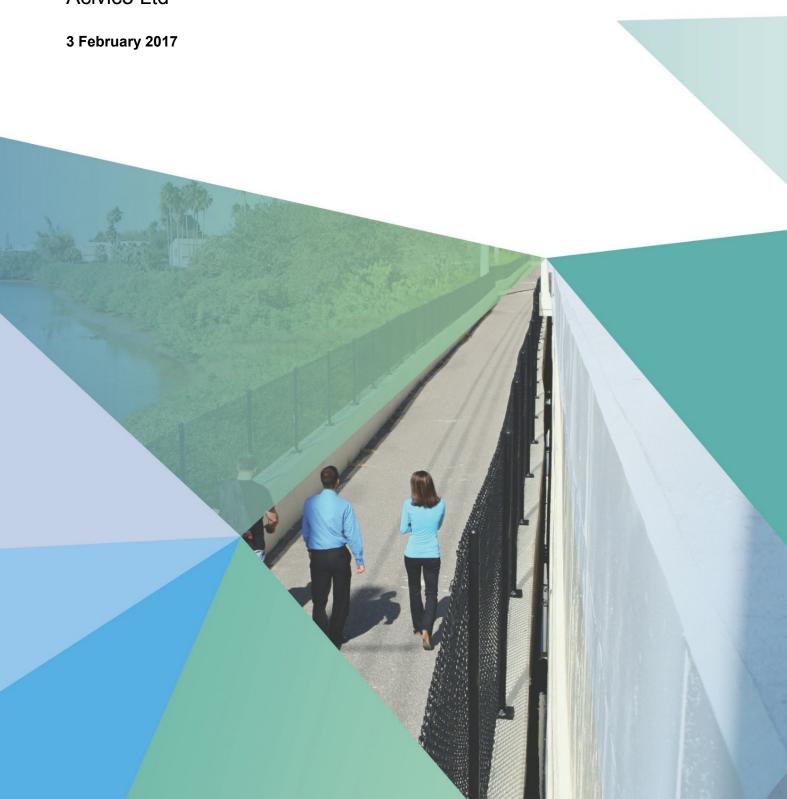
Moor Hall Primary School

Transport Statement Acivico Ltd



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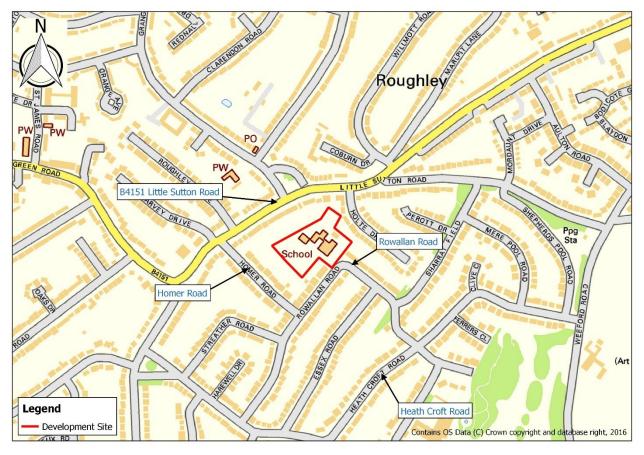


1. Introduction

1.1. Background

Atkins has been commissioned by Acivico Ltd to prepare a Transport Statement (TS) to accompany a full planning application in relation to the proposed expansion of Moor Hall Primary School, Sutton Coldfield. It is proposed to expand the existing 1FE primary school (231 pupils) to 2FE (420 pupils). The site location is shown in **Figure 1-1**.

Figure 1-1 Moor Hall Primary School Location Plan



Birmingham City Council has prepared a Full School Travel Plan (STP) in support of the planning application. The STP is a sustainable action plan to promote sustainable transport options for parents, pupils and teachers including cycling, walking, public transport and car sharing schemes.

1.2. Report Purpose

The TS evaluates the transportation aspects of the development proposals, whilst considering the existing sustainable transport network and services.

1.3. Scoping

Atkins has agreed the scope of this TS with Transportation Officers at the local highway authority, Birmingham City Council (BCC). A copy of the Scoping Report and responses are provided in **Appendix A** of this report.

1.4. Report Format

This report includes the following sections:

- Section 2 provides a review of the relevant local and national policy guidance;
- **Section 3** describes the existing situation in terms of the local highway network, accident data and multi-modal accessibility;
- Section 4 provides details of the proposed development;
- **Section 5** provides an estimate of the proposed trip generation;
- Section 6 provides a summary of the on-street parking survey;
- Section 7 provides a summary of the traffic impact; and
- Section 8 summarises the findings and conclusions.

2. Policy Review

2.1. Introduction

The Transport Statement is prepared in accordance with 'Travel Plans, Transport Assessments and Statements in Decision Taking' (March, 2014). This policy states that Transport Statements should be prepared where it is anticipated that developments will have limited transport impacts. Given the size of the development site, it is considered that a TS is the most appropriate report and this has been agreed with BCC.

This section summarises a range of relevant national and local policy in addition to a review of relevant parking standards, including the following documents:

- National Policy
 - National Planning Policy Framework (NPPF)
- Local Policy
 - o Birmingham Connected (2014)
- Parking Standards
 - o Birmingham City Council SPD, Car Parking Guidelines (2012)

2.2. National Policy

2.2.1. National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) came into force on the 27th March 2012. It aims to make the planning system less complex and more accessible, and at the same time promote sustainable growth. The NPPF replaces all previous Planning Policy Statements (PPSs) and Planning Policy Guidance (PPGs), including PPG13 (Transport) and PPS3 (Residential).

The NPPF sets out the Government's economic, environmental and social planning policies for England. Taken together, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally, to meet local aspirations.

Section 4 of the NPPF covers 'Promoting Sustainable Transport'. The appropriate elements of this section are summarised below.

Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions, varying from rural to urban areas.

The NPPF has retained the use of Transport Statements and Transport Assessments, and states that all developments generating significant amounts of movement should be supported by at least one of these documents.

The NPPF advises that developments should be located and designed where practical to:

- Accommodate the efficient delivery of goods and supplies;
- Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities:
- Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones; and
- Consider the travel needs of people with disabilities by all modes of transport.

2.3. Local Policy

2.3.1. Birmingham Connected (2014)

Birmingham Connected, launched on 13 November 2014, follows the Birmingham Mobility Action Plan Green Paper. It is directly linked to the strategies and policies outlined within the Birmingham Development Plan (BDP), which sets out the city's strategy for jobs and growth, meeting housing needs and sustainable progress. Investing in a radically improved integrated transport system will help to realise the city's potential to support sustainable economic growth, job creation and linking communities.

The vision of Birmingham Connected is to create a transport system which puts the user first and delivers the connectivity that people and businesses require. The proposals aim to improve people's daily lives by making travel more accessible, more reliable, safer and healthier and using investment in transport as a catalyst to improve the fabric of Birmingham. The transport system should also aim to reduce inequalities across the city by providing better access to jobs, training, healthcare and education as well removing barriers to mobility.

The five core objectives set out in Birmingham Connected are:

- 1. **Efficient Birmingham** Birmingham Connected will facilitate the city's growth agenda in the most efficient and sustainable way possible, strengthening its economy and boosting jobs.
- 2. **Equitable Birmingham** Birmingham Connected will facilitate a more equitable transport system; linking communities together and improving access to jobs and services.
- 3. **Sustainable Birmingham** Birmingham Connected will specifically reduce the impacts of air and noise pollution, greenhouse gas emissions and energy consumption.
- 4. **Healthy Birmingham** Birmingham Connected will contribute to a general raising of health standards across the city through the promotion of walking and cycling and the reduction of air pollution.
- 5. **Attractive Birmingham** Birmingham Connected will contribute to enhancing the attractiveness and quality of the urban environment in local centres, key transport corridors and the city centre.

2.4. Parking Standards

2.4.1. Birmingham City Council SPD, Car Parking Guidelines (2012)

The purpose of the 2012 Supplementary Planning Document (SPD) is to outline Birmingham City Council's parking standards for new development. The standards derived reflect the objectives of the City's Sustainable Communities Plan. In particular it aims to help ensure that:

- A balance is struck between the needs of different road users;
- The access needs of new developments are properly provided for; and
- Birmingham continues to be an attractive location for new investment and development.

The SPD acknowledges that public transport and accessibility vary significantly in different areas of the city, therefore maximum car parking standards are outlined independently for each area. The requirements for each area are:

- Area 1: Comprises of the City Core, defined on the basis of a 400m radius from New Street, Moor Street and Snow Hill Stations.
- Area 2: Consists of the 'outer' sections of the City Core. Additionally, this area includes sites located within a 500m radius of suburban rail and Metro stations, larger local centres where these do not include a rail or Metro station and centres with good public transport provision.
- Area 3: Comprises of the remainder of the City.

Birmingham City Council's Supplementary Planning Document (SPD) does not contain specific parking standards in relation to Primary Schools and therefore the maximum parking standards for 'Higher and further education and schools' have been used as a guide.

Moor Hall Primary School is located outside of the City Centre, and therefore according to the SPD should be considered under Area 3 standards. The maximum parking and minimum cycling standards (Higher and further education and schools) for Area 3 are outlined in **Table 2-1** as set out in the BCC's SPD.

Table 2-1 Car Parking and Cycle Parking Standards for Area 3, Sutton Coldfield (BCC SPD: Car Parking Guidelines 2012)

Land Use Classification	Area (As defined in SPD, 2012)	Parking Standards (Maximum)	Cycle Parking
D1 Higher and Further Education and Schools	Area 2 Standards	1 space per 2 staff and 1 space per 15 students	1 space per 10 staff or students

3. Baseline Conditions

3.1. Introduction

This section of the report outlines the operation of the existing school and associated travel patterns. Consideration is also given to the location of the development site in the context of the local transport network, the existing level of accessibility and local sustainable transport links.

3.2. Site Access

Moor Hall Primary School is accessed via a single vehicular access point located off Rowallan Road, and a separate pedestrian access point located along the southern extent of the site (see **Figure 3-1**). Pedestrian guardrails are located along the site's frontage along Rowallan Road.

Figure 3-1 Vehicular and Pedestrian Site Access Points



3.3. Existing School Operation

3.3.1. Existing Pupil and Staff Numbers

Moor Hall Primary School is a one form entry primary school for 4-11 year olds, with approximately 230 pupils currently on the school roll. Nursery provision is provided by Ducklings Private Nursery on-site.

Moor Hall Primary School have confirmed that the site currently employs 39 staff, comprising of 25 full-time staff and 14 part-time staff (including Kitchen Staff and Lunchtime Supervisors who are only on-site for 1.25 hours a day).

3.3.2. Hours of Operation and Clubs

The school operates between the hours of 08:50 – 15:20. A variety of extra-curricular clubs are offered each term including sporting and musical activities. The 'Moor Hall Extended School Club' (Moorhens) operates Monday to Friday and provides three sessions per day:

Breakfast Session: 08:00-08:50
Afternoon Session One: 15:20-16:40
Afternoon Session Two: 16:40-18:00

3.3.3. On-site Parking Provision

On-site car parking is provided for 16 vehicles (including one Disabled space and one designated space for the on-site Nursery) and is reserved for staff and visitors only. The existing car park is accessed via a single vehicular access point located off Rowallan Road. There are no cycle parking spaces provided on-site.

3.4. Existing School Travel Patterns

3.4.1. Existing Pupil Travel Modes

A pupil travel survey was undertaken by Moor Hall Primary School in January 2015 in order to understand how pupils currently travel to the school. Survey information is summarised in **Table 3-1**.

Table 3-1 Pupil Travel Mode Splits (January 2015)

Mode	Walking	Cycling	Car Passenger	Public Transport	Taxi	Other
% of Pupils	54%	0%	44%	0%	2%	0%

The pupil travel survey indicates that 54% of pupils travel to school on foot, with 44% travelling by car. Data from the National Travel Survey (NTS) 2014 showed that for Primary school journeys in England (children aged 5-10), the most common modes of travel are walking (46%) and car (46%). This indicates that the existing mode-share at Moor Hall primary school is comparable to the national average and considered sustainable.

3.4.2. Existing Staff Travel Modes

Information provided by Moor Hall Primary School indicated that 74% of the existing staff (full-time and part-time) travel to the site by car, whilst 23% walk and 3% use public transport.

3.4.3. Pupil Catchment Area

Moor Hall Primary School is located in the residential area of Four Oaks, Sutton Coldfield. Pupil home location information has been provided by Birmingham City Council (BCC) for the 2015/16 academic year (see **Table 3-2** and **Figure 3-2**).

Table 3-2 Distance Travelled by Pupils

Distance from School (km)							
	0-1	1-2	2-3	3-4	5+		
% of Pupils	75%	12%	7%	3%	3%		

Guidance provided by the Institution of Highways and Transportation (IHT) in their publication 'Guidelines for Providing for Journeys on Foot' indicates that with regards to 'commuting, walking to school and recreational journeys'; walking distances of up to 2km can be considered as a preferred maximum with 'desirable' and 'acceptable' distances being 500m and 1km respectively. It should however be noted that journeys of a longer length are often undertaken.

The analysis indicates that 75% of pupils enrolled at Moor Hall Primary School live within 1km of the school (i.e. an acceptable waking distance). This analysis demonstrates that Moor Hall Primary School is located in a sustainable and accessible location, in close proximity to a large residential catchment area.

Figure 3-2 Pupil Location Postcode Plot

3.5. Local Highway Network

The development site is located off Rowallan Road, a residential road which is subject to a 30mph speed limit. There are pedestrian footways located along both sides of the carriageway as shown in **Figure 3-3**. There are also lighting columns located along the full extent of Rowallan Road.

Most dwellings have access to private driveways along Rowallan Road and there is on-street parking located along both sides of the carriageway. There is a Traffic Regulation Order (TRO) in place outside Moor Hall Primary School, which prohibits vehicles from stopping on the entrance markings between the hours of 08:00am and 16:00pm (Mon-Fri).

Figure 3-3 Rowallan Road



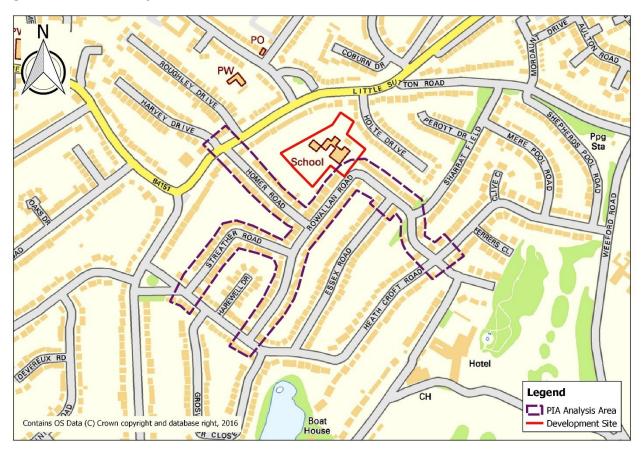
Rowallan Road is accessed via Heath Croft Road to the south and Homer Road to the northwest. Heath Croft Road and Homer Road are both existing residential roads with pedestrian footways and lighting columns located along both sides of the carriageway. There are dropped kerbs located at the Rowallan Road/ Homer Road and Rowallan Road/ Essex Road junctions.

The majority of roads in close proximity to the school are cul-de-sacs or residential distributor roads with pedestrian footways and lighting columns along both sides of the carriageway.

3.6. Personal Injury Accident Analysis

Personal Injury Accident (PIA) data has been obtained from the Department for Transport for the most recent five year period available (01/02/2011 to 31/03/2016). There were no PIAs recorded within the accident analysis area, as shown in **Figure 3-4**. Therefore, there is no evidence of pre-existing safety issues within the vicinity of Moor Hall Primary School.

Figure 3-4 PIA Analysis Area



3.7. Sustainable Travel Provision

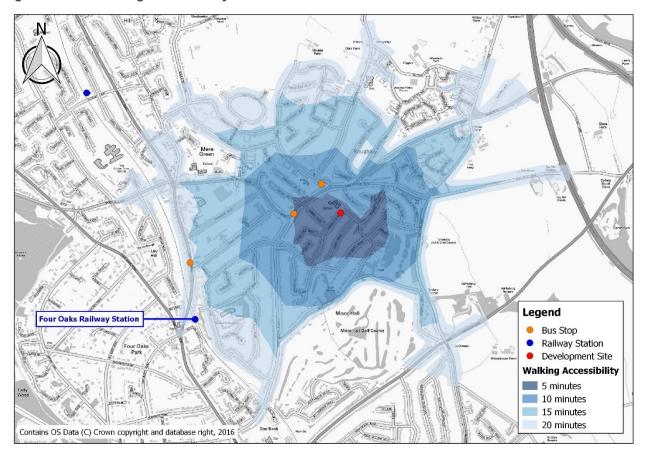
3.7.1. Pedestrian Accessibility

Existing pedestrian access into the site is via Rowallan Road. Rowallan Road is a residential road with both lighting columns and pedestrian footways located along both sides of the carriageway. Rowallan Road can be accessed via Heath Croft Road to the south, and Homer Road to the northwest. Heath Croft Road and Homer Road are existing residential roads with lighting columns and pedestrian footways located along on both sides of the carriageway.

Figure 3-5 demonstrates the distance which can be walked from the site within 20 minutes, based on a walking speed of 1.4m/s¹. It is therefore assumed that pedestrians are able to walk 420m in 5 minutes, 840m in 10 minutes, 1260m in 15 minutes and 1680m in 20 minutes. **Figure 3-5** demonstrates that it is possible to reach two bus stops within a 10 minute walk, and the majority of the surrounding residential area within a 15 minute walk.

¹ Guidelines for Providing for Journeys on Foot (IHT)

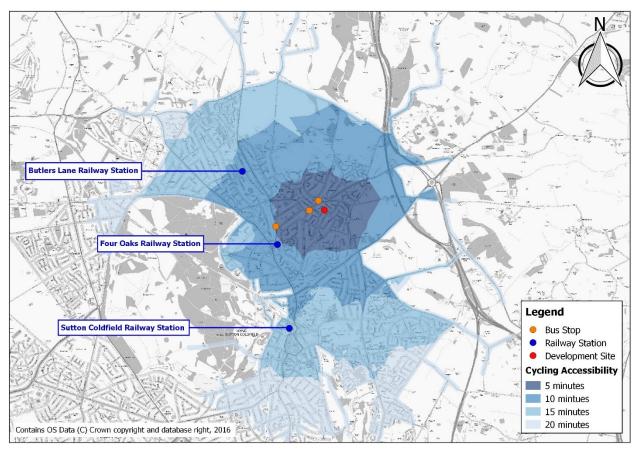
Figure 3-5 Walking Accessibility



3.7.2. Cycle Accessibility

Isochrones have been plotted to show 5, 10, 15 and 20 minute journey times by bicycle, shown in **Figure 3-6**. A cycling speed of 4.4m/s has been used, based on Sustrans Information Sheet F111 'Cycle Friendly Employers' Information Sheet' which states that "a five mile journey can be comfortably cycled by an adult in 30 minutes". **Figure 3-6** shows that an adult can reach the majority of the surrounding residential areas, and significant parts of Sutton Coldfield within 20 minutes.

Figure 3-6 Cycling Accessibility



3.7.3. Public Transport

3.7.3.1. Rail Services

Four Oaks Railway Station is the nearest railway station to the development site. It is located 1.6km south west of the site and can be accessed on foot or bicycle via the A5127 Lichfield Road. The railway station is situated on the Cross-City Line with frequent trains to local destinations including Birmingham and Lichfield. The station has a ticket office and self-serve ticket machines. **Table 3-3** provides a summary of the rail services available from Four Oaks Railway Station.

Table 3-3 Rail Services from Four Oaks Station

Destination	Day	Approximate Frequency	First Train	Last Train
Dirmingham Now	Weekday	5 per hour	06:06	23:41
Birmingham New Street	Saturday	5 per hour	06:06	23.41
	Sunday	2 per hour	09:18	23:18
	Weekday	5 per hour	06:25	23:39
Lichfield	Saturday	5 per hour	06:19	23:40
	Sunday	2 per hour	09:30	23:30

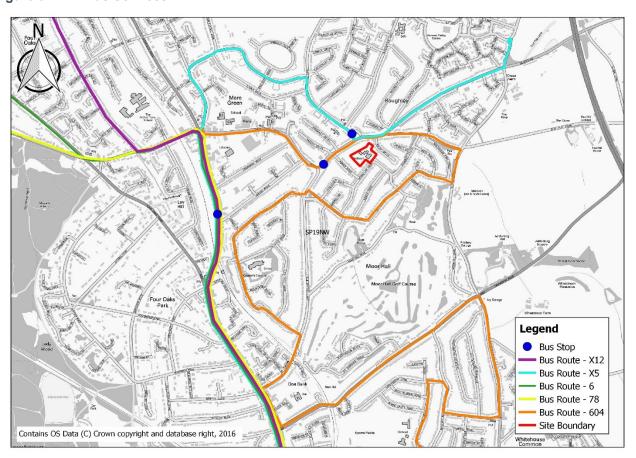
3.7.3.2. Bus Services

The nearest bus stop to Moor Hall Primary School is located along Little Sutton Road, approximately 450m to the north-east of the development site. There are two further bus stops located in close proximity of the development site, these are located on Grange Lane and on the A5127 Lichfield Road – near Four Oaks Railway Station. The bus services provided at these stops are outlined in **Table 3-4** below, and shown in **Figure 3-7**.

Table 3-4 Local Bus Services

Bus Stop Location	Route	Frequency (Monday to Friday Daytime)
B4151 Little Sutton Road	604 - Mere Green to Kingstanding via Sutton	60 mins
Grange Lane	X5 – Birmingham to via Sutton Coldfield	20 mins
	6 – Walsall to Sutton Coldfield via Aldridge	30 Mins
A5127 Lichfield Road	78 – Streetly to Sutton Coldfield via Mere Green	60 Mins
	X5 – Birmingham to via Sutton Coldfield	20 mins
	X12 – Burton to Sutton Coldfield	60 Mins

Figure 3-7 Bus Services



3.8. Summary

This section has demonstrated that 54% of the pupils currently enrolled at Moor Hall Primary School travel to school on foot, whilst 75% of the pupils currently enrolled live within a 1km radius. In addition, walking isochrones have demonstrated that the majority of the surrounding residential area can be accessed within a 15 minute walk. This analysis demonstrates that Moor Hall Primary School is located in a sustainable and accessible location in close proximity to a large residential catchment area.

Analysis of PIA data has been obtained from the Department for Transport for the most recent five year period available (01/02/2011 to 31/03/2016). There were no PIAs recorded within the accident analysis area, and therefore, there is no evidence of pre-existing safety issues within the vicinity of Moor Hall Primary School.

4. Development Proposals

4.1. Proposed Development

It is proposed to expand the existing Moor Hall Primary School within the site boundary. It is proposed that the existing 1FE primary school (231 pupils) is expanded to 2FE (420 pupils). It is proposed to accommodate an additional 15 staff (13 full-time and 2 part-time). A masterplan is provided in **Appendix B**.

4.2. Proposed Site Access

4.2.1. Proposed Vehicular Access

The school currently has a single vehicular access point located directly off Rowallan Road. The vehicular access arrangements to the proposed expansion will utilise the existing vehicular access point which is considered suitable.

4.2.2. Proposed Pedestrian Access

The school currently has a single pedestrian access point located directly off Rowallan Road. The pedestrian access arrangements to the proposed expansion will utilise the existing pedestrian access point which is considered suitable.

4.3. Drop-off/ Pick-ups

There are currently no dedicated drop-off/ pick-up points for parents, and the proposed expansion to Moor Hall Primary School is not proposing to provide drop-off/ pick-up facilities in order to discourage vehicular trips.

4.4. Servicing and Delivery

Servicing and Delivery will continue to be carried out via the single vehicular access point located off Rowallan Road.

4.5. Car Parking Provision

As identified in **Section 2.4** of this report, Moor Hall Primary School is located outside of the City Centre, however as outlined within the SPD, Sutton Coldfield and Four Oaks should be considered under Area 3 standards. Therefore, the relevant parking standard is '1 space per 2 members of staff' and '1 space per 15 pupils' (Higher and Further Education and School Use Class D1). A strict application of these standards is not considered to be appropriate, given that these standards apply to all education types and Moor Hall Primary School is located in a sustainable residential location.

On this basis, with a future total of 54 staff (38 full-time and 16 part-time), the proposed expansion to Moor Hall Primary School proposes to provide a total of 28 formally marked on-site parking spaces (including 2 for Disabled Provision), with adequate parking provision available on-street to accommodate additional demand.

4.6. Cycle Parking

The City Council's parking standards for cycle parking is "1 space per 10 staff or students".

A strict application of these standards is not necessarily considered to be appropriate given that these standards apply to all education types, and pupils at Primary School age do not generally cycle independently. It is therefore proposed to provide 22 secure on-site cycle parking spaces. The use of the on-site cycle parking spaces will be monitored as part of the associated Travel Plan.

5. Trip Generation

5.1. Pupils

As discussed in **Section 3.4.1** of this report, a pupil travel survey was undertaken by Moor Hall Primary School in January 2015 in order to understand how the existing pupils currently travel to the school. It is reasonable to assume that the new pupils associated with the proposed expansion to the existing school will replicate the same mode share. As identified, It is proposed that the existing 1FE primary school (231 pupils) is to be expanded to 2FE (420 pupils).

Table 5-1 Proposed Pupil Trip Generation

Mode	Mode Share Percentage	Number of Additional Pupils
Walk	54%	113
Cycle	0%	0
Car Passenger	44%	92
Public Transport	0%	0
Taxi	2%	4
Other	0%	0
Total	100%	210

As demonstrated in **Section 3.3.2**, there are a series of extra-curricular clubs offered each term including sporting and musical activities. In addition, the 'Moor Hall Extended School Club' offers one morning session and two afternoon sessions per day outside of school hours. Therefore, a proportion of the new pupils will attend some of the sessions outside of school hours, whilst a proportion of the additional pupils will be siblings or will travel with friends. Therefore, the number of the peak car trips will not equate to the total number of additional pupils traveling by car.

Table 5-1 indicates that the proposed expansion to Moor Hall Primary School will generate an additional 92 vehicle trips. However, information provided by the school indicates that 51.5% of the existing pupils currently have a sibling also enrolled at the school. On this basis, the number of additional car trips generated by the proposed expansion would be 61 (92/1.51).

5.2. Staff

As identified, the proposed expansion to Moor Hall Primary School would accommodate an additional 15 staff (12 full-time and 3 part-time). In addition to the 39 existing members of staff, Moor Hall Primary School will employ a future total of 54 staff (38 full-time and 16 part-time). The proposed staff trip generation is outlined in **Table 5-2**.

Table 5-2 Proposed Staff Trip Generation

Mode	Mode Share Percentage	Number of Staff
Car	74%	40
Walk	23%	13
Public Transport	3%	1
Total	100%	54

6. On-Street Parking

6.1. Introduction

During the scoping discussions with the Transportation Officers at the local highway authority, Birmingham City Council (BCC), it was agreed that consideration should be given to the current levels of on-street parking associated with the existing operation of Moor Hall Primary School.

Therefore, Parking Beat Surveys were undertaken on the following 'typical' days:

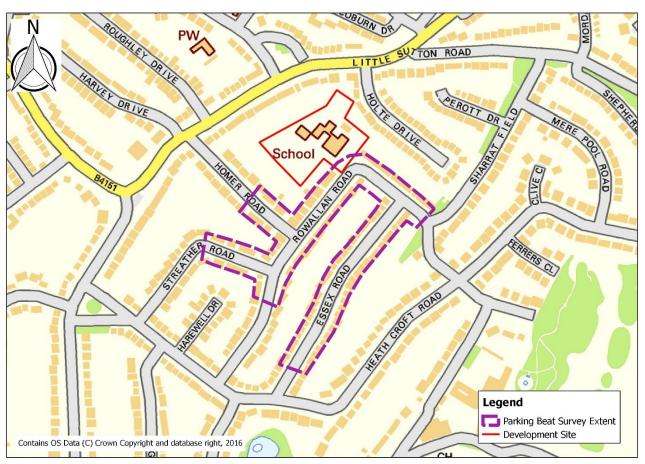
- Tuesday 10th January 2017 (08:00-09:30 and 14:30-16:00) Weather was dry and overcast and;
- Wednesday 11th January 2017 (08:00-09:30 and 14:30-16:00) Weather was dry and overcast.

The surveys were undertaken by Nationwide Data Collection (NDC) services. The full survey data is provided in **Appendix C** of this report.

6.2. Survey Scope

It was agreed with BCC during the scoping process that the geographic extent of the Parking Beat Survey should be based on a 5-minute walk from the school pedestrian access point located along Rowallan Road. The geographic extent of the Parking Beat Survey is outlined on **Figure 6-1** below.

Figure 6-1 Geographic Extent of Parking Beat Survey Area



6.3. Parking Restrictions

The following parking restrictions are currently in place within the extent of the Parking Beat Survey Area:

- Streather Road Double Yellow Lines around Streather Rd/ Rowallan Rd Junction;
- Rowallan Road School Keep Clear markings adjacent to School Access;
- Homer Road Double Yellow Lines around Homer Rd/ Rowallan Rd Junction; and
- Essex Road Double Yellow Line around Essex Rd/ Rowallan Rd Junction.

6.4. Survey Methodology

The aim of the survey was to identify the total level of parking capacity available, establish the current level of on-street parking likely to be associated with the school, and to record the spare parking capacity on-street within a 5-minute walk of the school pedestrian access. The surveys were snapshot surveys undertaken at 10 minute intervals between 08:00 and 09:30, and 14:30 to 16:00.

The total on-street parking capacity was established through a comprehensive site assessment whereby the available on-street parking capacity was measured on the ground. The capacity was established by calculating the total length of the carriageway (subtracting all restrictions) and dividing by 6m (assuming a requirement of 6m for a single parked vehicle). The comprehensive site assessment considered road width, Traffic Regulation Orders (TRO's), Junctions and private driveways in order to accurately calculate the existing on-street parking capacity within the Parking Beat survey area.

The total existing on-street parking capacity within the survey area was calculated to be 185 vehicles (capacity per section is provided in **Appendix C** of this report.

6.5. Survey Summary

The change in parking demand within the survey area is outlined in **Figure 6-2** and **Figure 6-3**. A summary of the Parking Beat Survey for each survey day is provided in **Table 6-1** and **Table 6-2**.

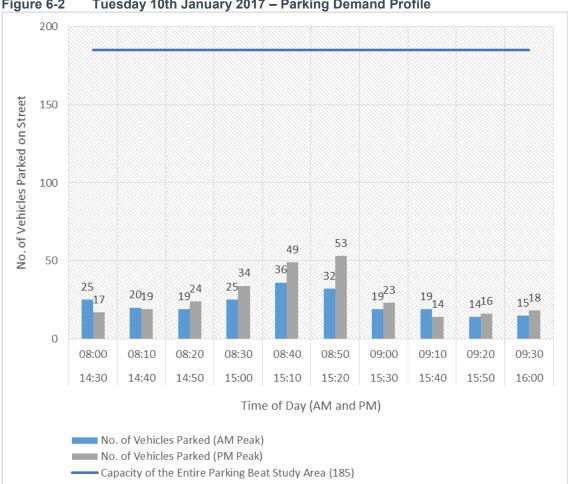
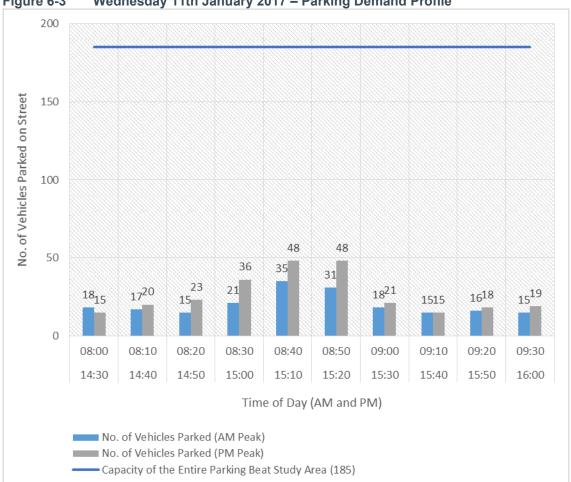


Figure 6-2 Tuesday 10th January 2017 - Parking Demand Profile

Table 6-1 **Tuesday 10th January 2017 - Survey Summary**

Time of Survey	Highest Recorded No. of vehicles parked on street during survey period	Lowest Recorded No of Vehicles parked on street during survey period	Calculated Existing School Traffic parked on- street	Additional Traffic parked on- street Post Expansion (an additional 91% based on increase in pupils)	Total School Traffic Parking Demand (Post Expansion)	Available Parking Capacity (Based on Capacity of 185)
AM	36	14	22	20	42	143
PM	53	14	39	35	74	111



Wednesday 11th January 2017 - Parking Demand Profile Figure 6-3

Table 6-2 Wednesday 11th January 2017 - Survey Summary

Time of Survey	Highest Recorded No. of vehicles parked on street during survey period	Lowest Recorded No of Vehicles parked on street during survey period	Calculated Existing School Traffic parked on- street	Additional Traffic parked on- street Post Expansion (an additional 91% based on increase in pupils)	Total School Traffic Parking Demand (Post Expansion)	Available Parking Capacity (Based on Capacity of 185)
AM	35	16	19	17	36	149
PM	48	15	33	30	63	122

It is evident from the results of the Parking Beat Surveys that on-street parking associated with Moor Hall Primary School does occur during the School start and finish times. The majority of the on-street parking recorded during the surveys was observed to be legal and appropriate, however, inappropriate and/or illegal parking was observed at the following survey locations:

- Rowallan Road between near Homer Road and Streather Road. One vehicle was observed to have parked within 10 metres of Homer Road during the PM survey period; and
- Rowallan Road in close proximity to the School. Two vehicles were observed double parking at this location, one during the AM survey period and one during the PM survey period.

The following conclusions can be drawn from the results of the Parking Beat Surveys:

- There is spare on-street parking capacity during both the AM and PM survey periods within the Parking Beat Survey area;
- There is slight daily variation in vehicular parking demand within the survey area;
- There is minimal spare parking capacity along Rowallan Road in close proximity to the School;
- Rowallan Road experiences some illegal parking; and
- Away from Rowallan Road, there is considerable spare parking capacity, particularly along Essex Road and Streather Road. These areas are still located within a 5 minute walk of the site access point.
- The additional vehicular parking demand associated with the proposed extension to Moor Hall Primary School can be adequately provided for within a 5 minute walking catchment area.

7. Traffic Impact Summary

7.1.1. External Highway Network

As outlined in **Section 3.3.2** of this report, the school start time occurs at the same time as the AM network peak hour period, however the school finish time occurs outside of the PM network peak hour period and therefore does not materially impact on the peak hour operation of the network.

During the AM network peak, a proportion of pupil trips will be diverted or pass by trips that are already on the local highway network. These are typically associated with parents who drop pupils off on their way to work. Since Rowallan Road is accessible from the north (via Sharrat Field Road), the south-east (via Heath Croft Road) and the north-west (via Homer Road and Streather Road) it is considered reasonable to assume that journeys to the school would be distributed via a minimum of three separate routes (taking into consideration the existing pupil post-code plots outlined in **Figure 3-2**).

In addition, any increase in vehicles close to the site will occur within a very short time period as demonstrated in the Parking Beat Survey demand profile, therefore the overall impact of the additional pupil vehicle trips on the local highway network is not considered to be significant.

With regards to the proposed staff trip generation, **Table 5-2** demonstrates that 40 members of staff will drive to the site. It is anticipated that 74% (number of full-time staff + before/after school club staff) of these trips (30 vehicles) will occur outside of the AM and PM School peak periods as staff will arrive before, and leave after the pupils. The impact of staff trips on the local highway network is therefore not considered to be significant.

7.1.2. Vehicle Drop-off – AM Peak

The results of the AM Parking Beat Surveys indicated that up to 36 vehicles were observed to be parked within the Parking Beat study area. The proposed expansion of Moor Hall Primary School is proposed to increase the existing 1FE primary school (231 pupils) to 2FE (420 pupils), a 91% increase in pupil numbers. This increase in pupil numbers suggests that the demand for on-street parking may also increase by 91% which would result in an additional 33 vehicles parked on-street. This is considered to be a robust assessment of the projected demand for on-street parking because not all of the vehicles recorded during the Parking Beat Survey would be associated with the school, and not all vehicles would arrive at the same time.

The parking survey indicates that there is sufficient on-street parking capacity available (within a 5 minute walk of the site) during the AM school peak to accommodate the maximum projected total demand (69 vehicles) generated by the proposed expansion to Moor Hall Primary School. It is acknowledged that a significant proportion of the available on-street parking capacity is located beyond Rowallan Road, however the available capacity is still within acceptable walking thresholds.

7.1.3. Vehicle Drop-off – PM Peak

The Parking Beat Surveys indicate that the highest demand for on-street parking occurs during the school PM peak period (15:20-15:30). During the PM peak period, the maximum recorded number of vehicles parking on-street was 53. The proposed increase in pupil numbers suggests that the demand for on-street parking may also increase by 91% which would result in an additional 48 vehicles parked on-street. This is considered to be a robust assessment of the projected demand for on-street parking because not all of the vehicles recorded during the Parking Beat Survey would be associated with the school and not all vehicles would arrive at the same time.

The parking survey indicates that there is sufficient on-street parking capacity to accommodate the additional demand associated with the proposed expansion to Moor Hall Primary School during the PM peak.

8. Summary and Conclusion

8.1. Summary

Atkins has been commissioned by Acivico Ltd to prepare a Transport Statement (TS) to accompany a full planning application in relation to the proposed expansion of Moor Hall Primary School, Sutton Coldfield. It is proposed to expand the existing 1FE primary school (231 pupils) to 2FE (420 pupils).

This TS has demonstrated that 54% of the pupils currently enrolled at Moor Hall Primary School travel to school on foot, whilst 75% of the pupils currently enrolled live within a 1km radius. In addition, walking isochrones have demonstrated that the majority of the surrounding residential area can be accessed within a 15 minute walk. This analysis demonstrates that Moor Hall Primary School is located in a sustainable and accessible location in close proximity to a large residential catchment area.

Analysis of Personal Injury Accident data for the most recent five year period available (01/02/2011 to 31/03/2016) demonstrated that there were no PIAs recorded within the accident analysis area. Therefore, there is no evidence of pre-existing safety issues within the vicinity of Moor Hall Primary School.

Parking Beat Surveys were commissioned in order to identify the total level of parking capacity available, establish the current level of on-street parking likely to be associated with the school, and to record the spare parking capacity on-street within a 5-minute walk of the school pedestrian access. The surveys were snapshot surveys undertaken at 10 minute intervals between 08:00 and 09:30, and 14:30 to 16:00.

The Parking Beat Surveys indicate that there is sufficient on-street parking capacity (within an acceptable walking distance) to accommodate the additional demand associated with the proposed expansion to Moor Hall Primary School during both the AM and PM School peak.

In addition, the proposed increase in vehicles associated with the proposed expansion to Moor Hall Primary School will occur within a very short time period as demonstrated in the Parking Beat Survey demand profile, therefore the overall impact of the additional vehicle trips on the local highway network is not considered to be significant.

8.2. Conclusion

It is not considered that the proposed expansion to Moor Hall Primary School would have a significant impact on the surrounding highway network, and the parking beat surveys undertaken have demonstrated that there is sufficient on-street parking capacity to accommodate the additional demand associated with the proposed expansion to Moor Hall Primary School. This report is submitted to BCC as the local highway authority for their consideration.

Appendices



Appendix A. Scoping Note



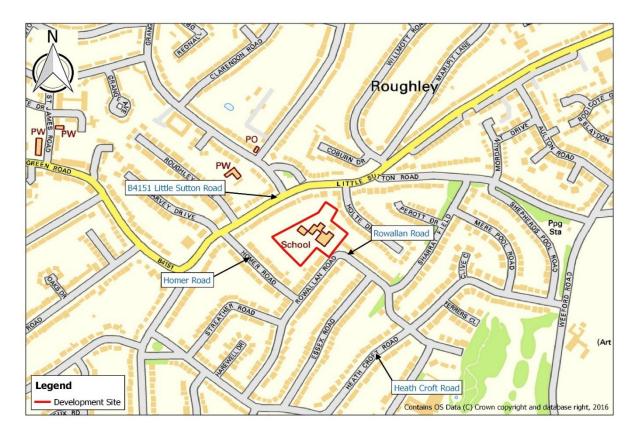
Project:	Moor Hall Primary School	То:	Deepak Challa, Birmingham City Council Highways Officers
Subject:	Transportation Scoping Note	From:	Tim Rogers, Atkins
Date:	1 Dec 2016	cc:	Ivan Jones, Acivico

1.1. Introduction

Atkins has been commissioned to prepare a Transport Statement (TS) in relation to the proposed expansion of Moor Hall Primary School, Sutton Coldfield. It is proposed to expand the existing 1FE primary school to 2FE, catering for a maximum of 420 pupils and accommodating up to 42 members of staff.

The site location plan is shown in Figure 1.

Figure 1. Site Location Plan



This Technical Note sets out the proposed scope and study area of the transportation inputs relating to the proposed development. This Technical Note will be submitted to Birmingham City Council (BCC) Highways Officers to seek agreement to the suggested scope and study area.

1.2. Policy

The Transport Statement will be prepared in accordance with 'Travel Plans, Transport Assessments and Statements in Decision Taking' (March 2014).

The proposed development is located within a residential area and it is therefore anticipated that the majority of the trips generated would be via sustainable means. We are proposing to prepare a Transport Statement in order to consider the multi-modal trip generation associated with the development proposals and the operation of the site access.



A brief review of relevant local and national transport related policy will be undertaken to ensure the proposed development accords with the relevant policy documents. This review will include:

- The National Planning Policy Framework (NPPF);
- Birmingham Connected (2014); and
- Birmingham City Council SPD, Car Parking Guidelines (2012).

1.3. Baseline Conditions

A review of the existing sustainable travel provision will be undertaken. This will include a desktop assessment of walking, cycling and public transport links. A site visit will be undertaken to verify the desktop exercise. Walking and cycling isochrones will be prepared using standard walking and cycling speeds to demonstrate the accessibility of the proposed 2FE Primary School for pupils and staff travelling by these modes of travel.

1.4. PIA Analysis

An analysis of personal injury accidents (PIA) will be undertaken for the latest five year period available. The accident analysis study area is identified in **Figure 2** and includes:

- The full extent of Homer Road including the B4151 Little Sutton/Homer Road priority junction and the Homer Road/Rowallan Road priority junction;
- The full extent of Rowallan Road including the Essex Road/Rowallan Road priority junction, the Sharrat Field/Rowallan Road priority junction, the Heath Croft Road/Rowallan Road crossroads, the Heath Croft Road/Rowallan Road priority junction and the Streather Road/Rowallan Road Crossroads; and
- The full extent of Streather Road, including the Heath Croft Road/Streather Road priority junction.

Figure 2. PIA Study Area





1.5. Development Proposals

The proposed development site is located in Sutton Coldfield, on Rowallan Road. It is proposed to expand the existing 1FE primary school (210 pupils) to a 2FE (420 pupils), as shown in the indicative site masterplan (**Appendix A**).

The TA will include full details of access for pedestrians, cyclists and vehicles (to include emergency service/service vehicle access).

Vehicle Parking will be considered in line with the Parking Standards set out in the *BCC Car Parking Guidelines SPD* (2012). The SPD specifies maximum levels of parking for schools (Use Class D1: 1 car parking space per 3 members of staff).

1.6. Site Access

Vehicular access for the 2FE Primary School will be taken via the extant vehicle access point located off Rowallan Road. The extant site access is currently used to access the existing 1FE Primary School located on the site.

Consideration will be given to the merits of introducing an on-site 'pick-up/ drop-off' point via the extant site access. Consideration will be given to any safety concerns and/or pedestrian conflicts arising as a result of the proposed on-site 'pick-up/ drop-off'.

Swept path analysis will be undertaken on the site access to demonstrate that both an Emergency Service Vehicle and a Refuse Vehicle can access the site. We will also prepare visibility splays for the site access in line with *Manual for Streets 2*.

1.7. Parking

Analysis of the existing off-site parking conditions will be undertaken, including an AM (08:30-09:00) and PM (15:00-15:30) parking beat survey along Rowallan Road and Essex Road in order to observe the current parking demand associated with the existing Primary School, and determine the impact of the development proposals. We will also observe existing vehicle behaviours to determine if vehicles are obstructing the carriageway and/or pedestrian facilities.

1.8. Trip Rates

In order to forecast the likely trip generation associated with the expansion of the existing 1FE Primary School to 2FE, trip rates have been extracted from the 04 – Education, A – Primary Category. Survey sites have been selected which are representative of the proposed development. The full TRICS outputs are provided in **Appendix B**.

Vehicular trip rates and the resultant trip generation associated with the proposed expansion to the existing 1FE primary school is shown in **Table 1**.

Table 1. Vehicular Trip Rates (per pupil)

	AM Peak (07:00-08:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
2. FF Drive and Cabasel (Draw accord)	0.072	0.037	0.109	0.037	0.069	0.106
2 FE Primary School (Proposed)	15	8	23	8	14	22

It is forecast that the proposed expansion of the existing 1FE Primary School to 2FE would generate up to 23 and 22 additional two-way vehicle trips in the AM and PM peak hours respectively. The forecast trip generation for the proposed development is low, and would not materially impact on the local highway network. Therefore it is not proposed to undertake any capacity assessments.



1.9. Summary

This Scoping Note is to be submitted to BCC for their comment, confirmation and approval of the following:

- Suggested scope and study area;
- Personal injury accident data study area (Figure 2) and period of assessment (5 years);
- Proposed parking analysis; and
- Proposed vehicular trip rates (Table 1);

Rogers, Tim

From: Deepak Challa < Deepak.Challa@birmingham.gov.uk>

Sent: 12 December 2016 12:47

To: Rogers, Tim
Cc: Ivan Jones

Subject: RE: Transport Scoping_ Proposed Expansion to Moor Hall Primary School

Attachments: Moor Hall Primary School_comments on scoping note.doc

Hi Tim,

Sorry for the delay in responding, however I was waiting for information from other officers.

With regards to the scoping report/technical note, please find the attached comments.

If you need any further information, please let me know.

Regards, Deepak

Deepak Challa MSc
Transportation Development Control Senior Area Officer
Transport & Connectivity
Economy Directorate
Birmingham City Council
1 Lancaster Circus Queensway, PO Box 14439
Birmingham, B2 2JE (Sat Nav B4 7DJ)
0121 6756828
deepak.challa@birmingham.gov.uk
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From: Rogers, Tim [mailto:Tim.Rogers@atkinsglobal.com]

Sent: Thursday, December 01, 2016 10:43 AM

To: Deepak Challa

Cc: Colles, Tim; Dale, Brendon

Subject: RE: Transport Scoping Proposed Expansion to Moor Hall Primary School

Importance: High

Good Morning Deepak,

Thank you for your email,

I appreciate that you were on leave until the 28th November.

Please find attached the scoping report in relation to the proposed expansion of Moor Hall Primary School.

With regards to a travel plan, it is not proposed that we will produce a Travel Plan.

Please can you provide an indication of how long it will take you to review the scoping report?

If you require a meeting in order to discuss any of the matters further please do not hesitate to get in touch.

I am on Annual Leave next week but my colleague Tim Colles is also working on this project and therefore please can you ensure that he is copied into any correspondence.

Kind Regards

Tim

Tim Rogers

Graduate Transport Planner, Transportation

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Twitter: www.twitter.com/atkinsglobal | Facebook: www.facebook.com/atkinsglobal | LinkedIn: www.twitter.com/atkinsglobal | Facebook: www.twitter.com/atkinsglobal | LinkedIn: <a href="www.twitter.com/atkinsglobal | LinkedIn: <a href="www.twitter.com/atkinsglobal | Lin

From: Deepak Challa [mailto:Deepak.Challa@birmingham.gov.uk]

Sent: 01 December 2016 10:25

To: Rogers, Tim < Tim.Rogers@atkinsglobal.com>

Subject: RE: Transport Scoping_ Proposed Expansion to Moor Hall Primary School

Hi Tim,

Sorry for the delay in responding, however I was on leave until 28. Yes, you can send the scoping report to me. In the mean-time, I will contact BCC behaviour change team and district engineer with regards to traffic / parking issues and let you know accordingly. Would you be preparing Travel Plan as well?

Regards, Deepak

Deepak Challa MSc
Transportation Development Control Senior Area Officer
Transport & Connectivity
Economy Directorate
Birmingham City Council
1 Lancaster Circus Queensway, PO Box 14439
Birmingham, B2 2JE (Sat Nav B4 7DJ)
0121 6756828
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Birmingham Connected is our vision for the future of transport in Birmingham, working towards a safer, healthier, greener city with a reliable integrated transport system which supports our growing population and economy. To find out more about the vision and get the latest information on transport projects and works affecting Birmingham please visit www.birmingham.gov.uk/connected

From: Rogers, Tim [mailto:Tim.Rogers@atkinsglobal.com]

Sent: Tuesday, November 22, 2016 8:26 AM

To: Deepak Challa

www.birmingham.gov.uk

Subject: Transport Scoping_ Proposed Expansion to Moor Hall Primary School

Importance: High

Good Morning,

Atkins have been appointed by Ivan Jones (Acivico) to prepare a Transport Statement in relation to the proposed expansion of Moor Hall primary School in Sutton Coldfield.

Ivan has indicated that I need to contact yourself in order to scope out the proposed assessment.

Please can you confirm if I am able to send a scoping report through to yourself?

Regards

Tim

Tim Rogers

Graduate Transport Planner, Transportation

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Comments on scoping note for Moor Hall Primary School

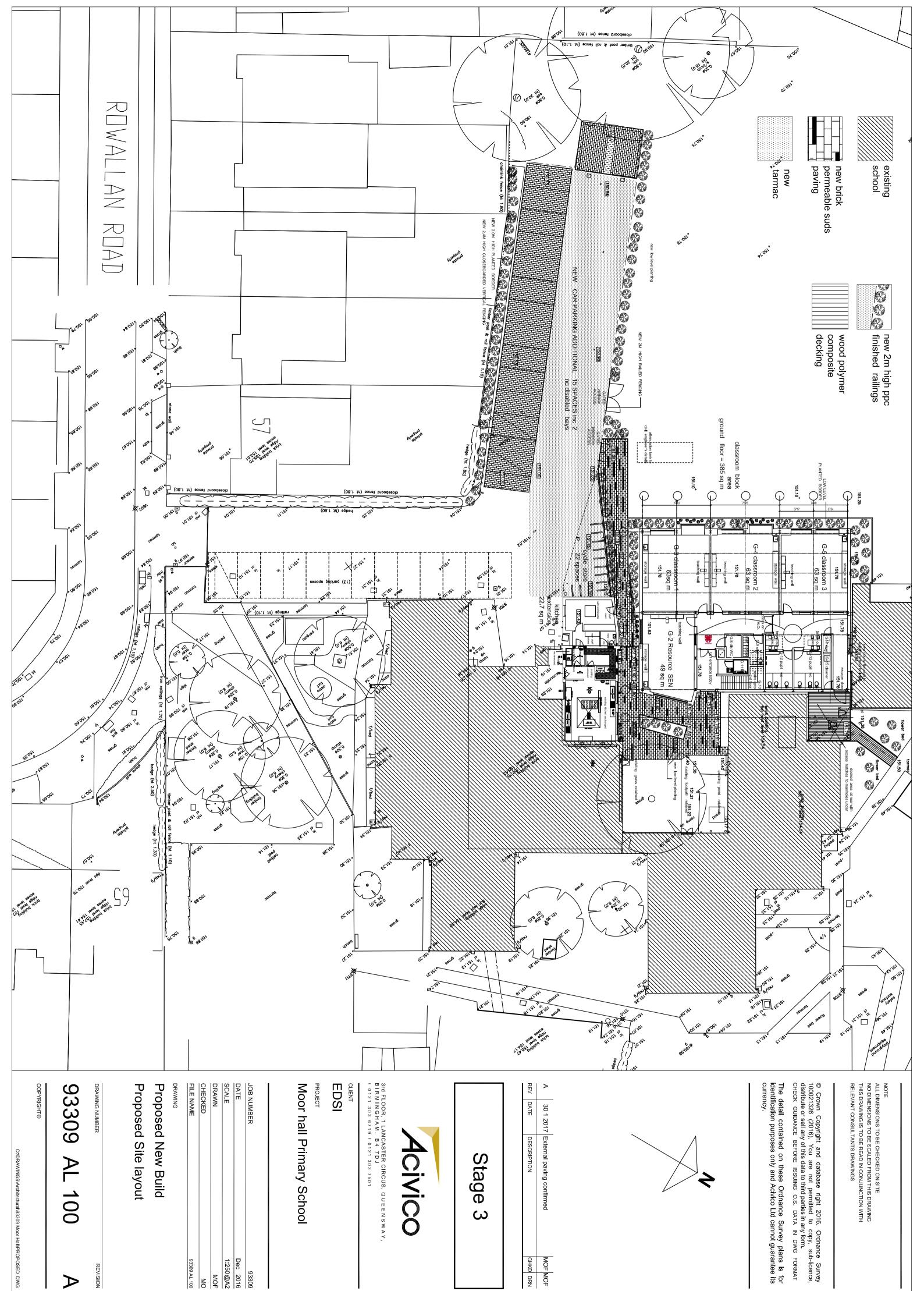
Transport Statement to include a review of relevant transport policy, mode share information of existing pupil and staff, review car and cycle parking standards and establish future demand, trip generation for the proposed extension, likely increase in school drop offs/pickups and it's impact on surrounding highways, accident analysis, mitigation measures that may be necessary to address any specific issues relating to inappropriate parking/drop offs, pedestrian crossing activity or specific safety concerns etc. This would also require site visits to cover both am and pm peaks of school to observe queuing characteristics at local junctions, parking characteristics on the local roads and on the school site, patterns associated with drop offs / pickups, existing access arrangements, pedestrian crossing facilities and how the pedestrians are crossing, existing highway characteristics [i.e. traffic calming features etc.], existing TROs, existing travel patterns etc. and detailed information to be provided within TS. It is also suggested to carry out parking surveys, including any illegal / inconsiderate parking, on surrounding highways close to the school during school term time for the busiest time for the school (start/finish time etc.). Parking surveys should be extended to capture any staff parking taking place on-street. The above data would inform the assessment.

- The detailed surveys should be carried out more than one occasions during both the school start and finish times to observe the parking, traffic, any illegal/inconsiderate parking taking place etc. and accurate details would need to be provided within TS. The survey should be extended beyond this time to capture any staff parking taking place on-street. Your submission refers to the proposed survey period as 08:30-09:00 and 15:00-15:30. However, within the recent school TSs, the survey periods of 0800-0930 and 1430-1600 were requested and a number of surveys were carried out during those periods. I would recommend the same periods.
- For the parking beat surveys, you will need to figure out the capacity on surrounding highways by considering the existing drop-kerbs, TROs, distances near junctions etc. so that you can consider the observed on-street parking against this capacity and figure out any spare capacity etc.
- You are proposing to use TRICS for trip generation exercise, however the current mode share data should also be considered for this and the assessment should be carried out for the worst case scenario. The details of mode share data can be obtained from BCC Behaviour Change Team (Mandi Slater, 0121 303 1873).
- TS to consider appropriate mitigation measures to address the issues associated with traffic, parking etc.
- I have consulted district engineer with regards to the proposed expansion at this school. According to him, they have previously received complaints from parents regarding traffic and parking in the vicinity of the school and he has visited the site previously with other officers to have a walk round to see the issues first hand. He had referred to the measures to be considered including an extension of the waiting restrictions near the school entrance and the bend in Rowallan Road, possible introduction of one way restrictions to ease congestion, the provision of pedestrian crossing facilities on Little Sutton Road near Sharratt Field and

Slade Road near Wilmott Road, improved crossing facilities in Little Sutton Road near the Fox and Dogs pub and introduction of a 20mph speed limit. Therefore, You will need to consider mitigation measures and associated funding arrangement to address the issues.

- Your submission refers to the "potential sketch solution for access and drop-off". Further information regarding this should be provided including the details to demonstrate that the proposed facility would be sufficient to cater the demand without having negative impact on surrounding highways, how it would operate considering that due to the age of the children, most parents would probably want to accompany them into school, could some parking bays (if it is going to operate one-way, then chevron parking) be provided along with some safety measures for people crossing? etc. I understand that this area would remain education land. It is also considered that during the pick-up period the parents normally arrive early to pick-up the students and park waiting for the school to finish, therefore TS would need to consider this.
- You can have a look at TS for another school in Sutton (Maney Hill Primary School) as an example, which should be available on Planning Portal under 2016/06022/PA.

Appendix B. Site Masterplan



93309

 \triangleright

Appendix C. Parking Beat Survey Outputs



Midlands

Haseley Office Centre, Firs Lane, Haseley, Warwick, CV35 7LS

Tel: 01926 485504 Fax: 01926 485537

ATKINS SUTTON COLDFIELD TRAFFIC SURVEY

SURVEY REPORT JANUARY 2017

PROJECT NO.	7031
CHECKED	N. TOONE
DATE	16/01/2017
CONTACT	J. ELLIOT
REVISION	



CONTENTS

Introduction

General Location Plan

Drawings 7031-01

Appendix A – Vehicle Categories

Appendix B – Parking Beat Data



INTRODUCTION

Nationwide Data Collection (NDC) was instructed by Atkins to undertake Parking Beat Surveys in Sutton Coldfield, West Midlands. All surveys were carried out on Tuesday 10th and Wednesday 11th January 2017. A general location plan is given in Diagram 1.

Parking Beat Survey

Parking Beats were carried out at ten minute intervals between 08:00 to 09:30 and 14:30 to 16:00 on both days.

For ease of survey the study area was divided into 16 individual beat areas, the details of which are shown on Drawing 7031-01. The total length of each beat was measured in metres, together with the length of any single or double yellow waiting restrictions, or any other white-line parking restrictions such as school markings. The overall number of available spaces was subsequently calculated as follows:

(total beat length - sum of all restrictions)/6

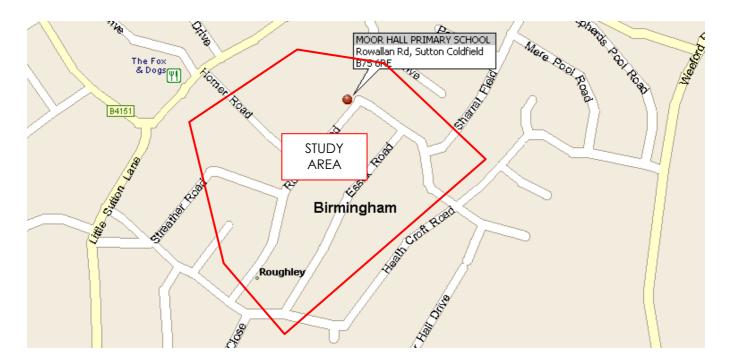
Vehicles were classified into the following categories: Cars and taxis (CAR), Light Goods Vehicles (LGV), Heavy Goods Vehicles (HGV). Details of the vehicles included in each category are contained in Appendix A. A copy of the data is included in Appendix B.

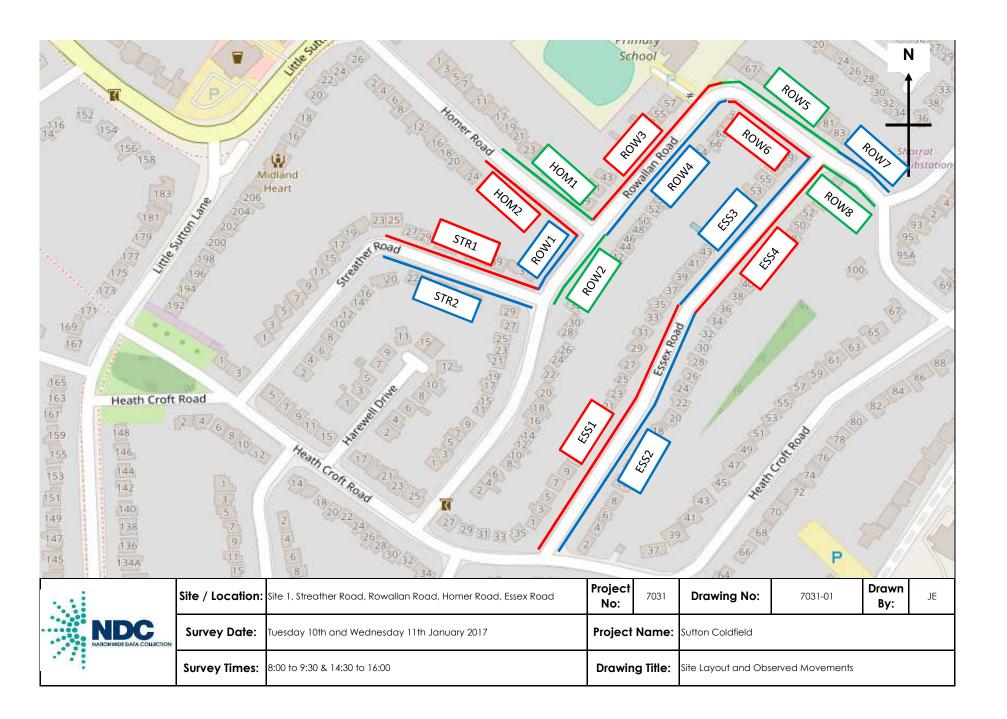
Site Notes

The weather was mainly overcast and cold with some spells of drizzle in the afternoon on Tuesday, and Wednesday remained Sunny and dry throughout the day.

All data has been emailed to tim.rogers@atkinsglobal.com

Diagram 1 - General Location Plan



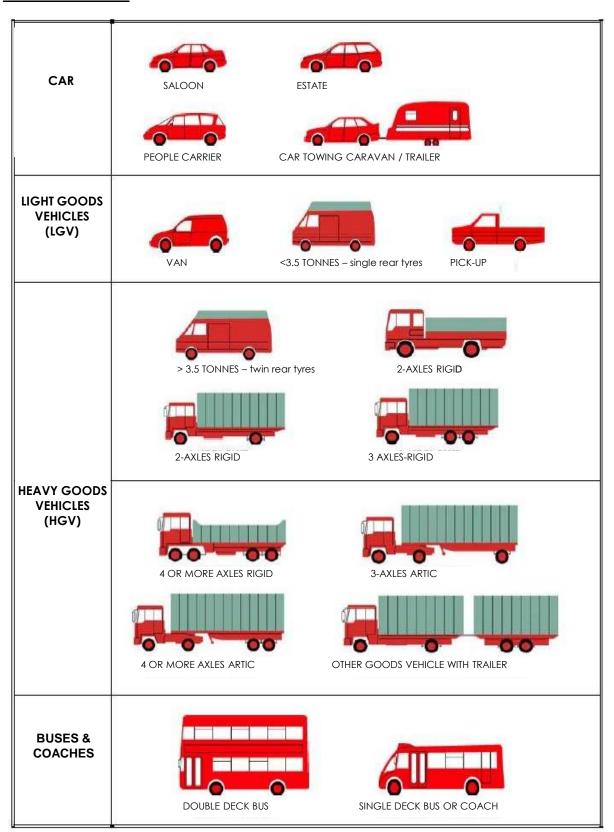




APPENDIX A Vehicle Categories



VEHICLE CATEGORIES





VEHICLE CATEGORIES

Definition of Categories

The various components of traffic have different characteristics in terms of operating costs, growth and occupancy. For the purpose of this survey vehicles types are defined as follows:

All OGV 1 & OGV2 Goods Vehicles are defined as Heavy Vehicles (HV).

Cars (CARS)

Including taxis, estate cars, 'people carriers' and other passenger vehicles (for example, minibuses and camper vans) with a gross vehicle weight of less than 3.5 tonnes, normally ones which can accommodate not more than 15 seats. Three-wheeled cars, motor invalid carriages, Land Rovers, Range Rovers and Jeeps and smaller ambulances are included. Cars towing caravans or trailers are counted as one vehicle unless included as a separate class.

Light Goods Vehicles (LGV)

Includes all goods vehicles up to 3.5 tonnes gross vehicle weight (goods vehicles over 3.5 tonnes have sideguards fitted between axles), including those towing a trailer or caravan. This includes all car delivery vans and those of the next larger carrying capacity such as transit vans. Included here are small pickup vans, three-wheeled goods vehicles, milk floats and pedestrian controlled motor vehicles. Most of this group is delivery vans of one type or another.

Other Goods Vehicles (OGV 1)

Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles Includes larger ambulances, tractors (without trailers), road rollers for tarmac pressing, box vans and similar large vans. A two or three axle motor tractive unit without a trailer is also included.

Other Goods Vehicles (OGV 2)

This category includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.

Buses

Includes all public service vehicles

Coaches

Includes all works buses and private hire buses with a gross vehicle weight of 3.5 tonnes or more, usually vehicles with more than 16 seats.



APPENDIX B Parking Beat Data



LOCATION: Sutton Coldfield DATE: 10/01/2017

STREET	BEAT	TOTAL LENGTH (m)	DOUBLE YELLOW	SINGLE YELLOW	DROPPED KERBS	WHITE LINES / OTHER	AVAILABLE SPACES
STREATHER ROAD	STR1	111.5	12	0	35	0	11
	STR2	112.9	12	0	21.5	0	13
ROWALLEN ROAD	ROW1	46	6	0	14.5	0	4
	ROW2	60.6	0	0	31	0	5
	ROW3	133.7	3	0	42	0	15
	ROW4	136.5	19	0	50	0	11
	ROW5	89.2	0	0	33	0	9
	ROW6	72.3	5	0	3	0	11
	ROW7	48.3	12	0	16.5	0	3
	ROW8	41.8	23	0	0	0	3
HOMER ROAD	HOM1	75	12	0	11	0	9
	HOM2	76.1	12	0	18	0	8
essex road	ESS1	225.1	0	0	55	0	28
	ESS2	235.1	0	0	61	0	29
	ESS3	140.3	12	0	52	0	13
	ESS4	126.1	10.5	0	37.5	0	13

Notes

Available spaces are calculated in accordance with Northamptonshire Highways method of (Total Length - All Restrictions) / 6m, which may underestimate the achievable capacity.



STREET NAME: Streather Road DATE: 10/01/2017

DAY: Tuesday

Notes

			BEAT:	STR1				
		LEGAL			ILLEGAL			
	VE	HICLE TYPE		'	VEHICLE TYP	PE		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	1	0	0	0	0	0	9.1%	10
08:10	1	0	0	0	0	0	9.1%	10
08:20	1	0	0	0	0	0	9.1%	10
08:30	0	0	0	0	0	0	0.0%	11
08:40	0	0	0	0	0	0	0.0%	11
08:50	1	0	0	0	0	0	9.1%	10
09:00	1	0	0	0	0	0	9.1%	10
09:10	0	0	0	0	0	0	0.0%	11
09:20	0	0	0	0	0	0	0.0%	11
09:30	0	0	0	0	0	0	0.0%	11
14:30	0	0	0	0	0	0	0.0%	11
14:40	0	0	0	0	0	0	0.0%	11
14:50	0	0	0	0	0	0	0.0%	11
15:00	0	0	0	0	0	0	0.0%	11
15:10	0	0	0	0	0	0	0.0%	11
15:20	0	0	0	0	0	0	0.0%	11
15:30	0	0	0	0	0	0	0.0%	11
15:40	0	0	0	0	0	0	0.0%	11
15:50	0	0	0	0	0	0	0.0%	11
16:00	0	0	0	0	0	0	0.0%	11

			BEAT:	STR2				
		LEGAL			ILLEGAL			
	VE	HICLE TYPE		1	VEHICLE TYP	Έ		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	3	0	0	0	0	0	23.1%	10
08:10	3	0	0	0	0	0	23.1%	10
08:20	3	0	0	0	0	0	23.1%	10
08:30	1	0	0	0	0	0	7.7%	12
08:40	1	0	0	0	0	0	7.7%	12
08:50	1	0	0	0	0	0	7.7%	12
09:00	1	0	0	0	0	0	7.7%	12
09:10	1	0	0	0	0	0	7.7%	12
09:20	1	0	0	0	0	0	7.7%	12
09:30	2	0	0	0	0	0	15.4%	11
14:30	2	0	0	0	0	0	15.4%	11
14:40	2	0	0	0	0	0	15.4%	11
14:50	2	0	0	0	0	0	15.4%	11
15:00	2	0	0	0	0	0	15.4%	11
15:10	4	0	0	0	0	0	30.8%	9
15:20	7	0	0	0	0	0	53.8%	6
15:30	8	0	0	0	0	0	61.5%	5
15:40	4	0	0	0	0	0	30.8%	9
15:50	4	0	0	0	0	0	30.8%	9
16:00	4	0	0	0	0	0	30.8%	9



STREET NAME: Streather Road DATE: 11/01/2017

DAY: Wednesday

Notes

			BEAT:	STR1				
		LEGAL			ILLEGAL			
	VE	HICLE TYPE		'	VEHICLE TYP	Ϋ́E		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	2	0	0	0	0	0	18.2%	9
08:10	2	0	0	0	0	0	18.2%	9
08:20	2	0	0	0	0	0	18.2%	9
08:30	2	0	0	0	0	0	18.2%	9
08:40	2	0	0	0	0	0	18.2%	9
08:50	2	0	0	0	0	0	18.2%	9
09:00	1	0	0	0	0	0	9.1%	10
09:10	0	0	0	0	0	0	0.0%	11
09:20	0	0	0	0	0	0	0.0%	11
09:30	0	0	0	0	0	0	0.0%	11
14:30	1	0	0	0	0	0	9.1%	10
14:40	1	0	0	0	0	0	9.1%	10
14:50	1	0	0	0	0	0	9.1%	10
15:00	1	0	0	0	0	0	9.1%	10
15:10	1	0	0	0	0	0	9.1%	10
15:20	1	0	0	0	0	0	9.1%	10
15:30	1	0	0	0	0	0	9.1%	10
15:40	1	0	0	0	0	0	9.1%	10
15:50	1	0	0	0	0	0	9.1%	10
16:00	1	0	0	0	0	0	9.1%	10

		LEGAL			ILLEGAL			
	VE	HICLE TYPE		'	VEHICLE TYP	E		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	3	0	0	0	0	0	23.1%	10
08:10	3 2	0	0	0	0	0	23.1%	10
08:20		0	0	0	0	0	15.4%	11
08:30	2	0	0	0	0	0	15.4%	11
08:40	1	0	0	0	0	0	7.7%	12
08:50	1	0	0	0	0	0	7.7%	12
09:00	1	0	0	0	0	0	7.7%	12
09:10	1	0	0	0	0	0	7.7%	12
09:20	1	0	0	0	0	0	7.7%	12
09:30	1	0	0	0	0	0	7.7%	12
14:30	1	0	0	0	0	0	7.7%	12
14:40	1	0	0	0	0	0	7.7%	12
14:50	1	0	0	0	0	0	7.7%	12
15:00	1	0	0	0	0	0	7.7%	12
15:10	5	0	0	0	0	0	38.5%	8
15:20	5	0	0	0	0	0	38.5%	8
15:30	4	0	0	0	0	0	30.8%	9
15:40	4	0	0	0	0	0	30.8%	9
15:50	4	0	0	0	0	0	30.8%	9
16:00	4	0	0	0	0	0	30.8%	9



DAY: Tuesday

Notes

			BEAT:	ROW1				
		LEGAL			ILLEGAL			
	VEI	HICLE TYPE		٧	EHICLE TY			
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	4
08:10	0	0	0	0	0	0	0.0%	4
08:20	0	0	0	0	0	0	0.0%	4
08:30	0	0	0	0	0	0	0.0%	4
08:40	1	0	0	0	0	0	25.0%	3
08:50	2	0	0	0	0	0	50.0%	2
09:00	1	0	0	0	0	0	25.0%	3
09:10	0	0	0	0	0	0	0.0%	4
09:20	0	0	0	0	0	0	0.0%	4
09:30	0	0	0	0	0	0	0.0%	4
14:30	0	0	0	0	0	0	0.0%	4
14:40	0	0	0	0	0	0	0.0%	4
14:50	0	0	0	0	0	0	0.0%	4
15:00	1	0	0	0	0	0	25.0%	3
15:10	3	0	0	0	0	0	75.0%	1
15:20	3	0	0	1	0	0	100.0%	0
15:30	0	0	0	1	0	0	25.0%	3
15:40	0	0	0	0	0	0	0.0%	4
15:50	0	0	0	0	0	0	0.0%	4
16:00	0	0	0	0	0	0	0.0%	4

			BEAT:	ROW2				
		LEGAL			ILLEGAL			
	VE	HICLE TYPE		\	EHICLE TY	PE		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	5
08:10	0	0	0	0	0	0	0.0%	5
08:20	0	0	0	0	0	0	0.0%	5
08:30	0	0	0	0	0	0	0.0%	5
08:40	0	0	0	0	0	0	0.0%	5
08:50	0	0	0	0	0	0	0.0%	5
09:00	0	0	0	0	0	0	0.0%	5
09:10	1	0	0	0	0	0	20.0%	4
09:20	1	0	0	0	0	0	20.0%	4
09:30	1	0	0	0	0	0	20.0%	4
14:30	0	0	0	0	0	0	0.0%	5
14:40	0	0	0	0	0	0	0.0%	5
14:50	0	0	0	0	0	0	0.0%	5
15:00	0	0	0	0	0	0	0.0%	5
15:10	0	0	0	0	0	0	0.0%	5
15:20	1	0	0	0	0	0	20.0%	4
15:30	1	0	0	0	0	0	20.0%	4
15:40	0	0	0	0	0	0	0.0%	5
15:50	0	0	0	0	0	0	0.0%	5
16:00	1	0	0	0	0	0	20.0%	4



DAY: Tuesday

Notes

			BEAT:	ROW3				
		LEGAL			ILLEGAL			
	VEI	HICLE TYPE		٧	EHICLE TY	PE		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	6	0	0	0	0	0	40.0%	9
08:10	5	0	0	0	0	0	33.3%	10
08:20	6	0	0	0	0	0	40.0%	9
08:30	6	0	0	0	0	0	40.0%	9
08:40	7	0	0	0	0	0	46.7%	8
08:50	7	0	0	0	0	0	46.7%	8
09:00	3	0	0	0	0	0	20.0%	12
09:10	6	0	0	0	0	0	40.0%	9
09:20	3	0	0	0	0	0	20.0%	12
09:30	3	0	0	0	0	0	20.0%	12
14:30	3	0	0	0	0	0	20.0%	12
14:40	3	0	0	0	0	0	20.0%	12
14:50	2	0	0	0	0	0	13.3%	13
15:00	6	0	0	0	0	0	40.0%	9
15:10	9	0	0	0	0	0	60.0%	6
15:20	8	0	0	0	0	0	53.3%	7
15:30	3	0	0	0	0	0	20.0%	12
15:40	2	0	0	0	0	0	13.3%	13
15:50	3	0	0	0	0	0	20.0%	12
16:00	4	0	0	0	0	0	26.7%	11

		BEAT: ROW4								
		LEGAL			ILLEGAL					
	VE	HICLE TYPE		V	EHICLE TY					
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES		
08:00	3	0	0	0	0	0	27.3%	8		
08:10	3	0	0	0	0	0	27.3%	8		
08:20	3	0	0	0	0	0	27.3%	8		
08:30	3	0	0	0	0	0	27.3%	8		
08:40	3	0	0	0	0	0	27.3%	8		
08:50	5	0	0	0	0	0	45.5%	6		
09:00	5	0	0	0	0	0	45.5%	6		
09:10	3	0	0	0	0	0	27.3%	8		
09:20	2	0	0	0	0	0	18.2%	9		
09:30	2	0	0	0	0	0	18.2%	9		
14:30	1	0	0	0	0	0	9.1%	10		
14:40	1	0	0	0	0	0	9.1%	10		
14:50	3	0	0	0	0	0	27.3%	8		
15:00	5	0	0	0	0	0	45.5%	6		
15:10	4	0	0	0	0	0	36.4%	7		
15:20	4	0	0	0	0	0	36.4%	7		
15:30	2	0	0	0	0	0	18.2%	9		
15:40	1	0	0	0	0	0	9.1%	10		
15:50	1	0	0	0	0	0	9.1%	10		
16:00	2	0	0	0	0	0	18.2%	9		



DAY: Tuesday

Notes

			BEAT:	ROW5				
		LEGAL			ILLEGAL			
	VEI	HICLE TYPE		٧	EHICLE TY	PE		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	9	0	0	0	0	0	100.0%	0
08:10	6	0	0	0	0	0	66.7%	3
08:20	4	0	0	0	0	0	44.4%	5
08:30	7	0	0	0	0	0	77.8%	2
08:40	7	0	0	0	0	0	77.8%	2
08:50	5	0	0	0	0	0	55.6%	4
09:00	5	0	0	0	0	0	55.6%	4
09:10	5	0	0	0	0	0	55.6%	4
09:20	5	0	0	0	0	0	55.6%	4
09:30	5	0	0	0	0	0	55.6%	4
14:30	6	0	0	0	0	0	66.7%	3
14:40	8	0	0	0	0	0	88.9%	1
14:50	8	0	0	0	0	0	88.9%	1
15:00	8	0	0	0	0	0	88.9%	1
15:10	8	0	0	0	0	0	88.9%	1
15:20	7	0	0	0	0	0	77.8%	2
15:30	2	0	0	0	0	0	22.2%	7
15:40	3	0	0	0	0	0	33.3%	6
15:50	3	0	0	0	0	0	33.3%	6
16:00	3	0	0	0	0	0	33.3%	6

			BEAT:	ROW6				
		LEGAL			ILLEGAL			
	VE	HICLE TYPE		١	EHICLE TY			
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	11
08:10	0	0	0	0	0	0	0.0%	11
08:20	0	0	0	0	0	0	0.0%	11
08:30	1	0	0	0	0	0	9.1%	10
08:40	0	0	0	0	0	0	0.0%	11
08:50	0	0	0	0	0	0	0.0%	11
09:00	0	0	0	0	0	0	0.0%	11
09:10	0	0	0	0	0	0	0.0%	11
09:20	0	0	0	0	0	0	0.0%	11
09:30	0	0	0	0	0	0	0.0%	11
14:30	0	0	0	0	0	0	0.0%	11
14:40	0	0	0	0	0	0	0.0%	11
14:50	0	0	0	0	0	0	0.0%	11
15:00	0	0	0	0	0	0	0.0%	11
15:10	0	0	0	0	0	0	0.0%	11
15:20	0	0	0	0	0	0	0.0%	11
15:30	0	0	0	0	0	0	0.0%	11
15:40	0	0	0	0	0	0	0.0%	11
15:50	0	0	0	0	0	0	0.0%	11
16:00	0	0	0	0	0	0	0.0%	11



DAY: Tuesday

Notes

		BEAT: ROW7								
		LEGAL			ILLEGAL					
	VEI	HICLE TYPE		٧	EHICLE TY	PE				
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES		
08:00	0	0	0	0	0	0	0.0%	3		
08:10	0	0	0	0	0	0	0.0%	3		
08:20	0	0	0	0	0	0	0.0%	3		
08:30	3	0	0	0	0	0	100.0%	0		
08:40	3	0	0	0	0	0	100.0%	0		
08:50	0	0	0	0	0	0	0.0%	3		
09:00	0	0	0	0	0	0	0.0%	3		
09:10	1	0	0	0	0	0	33.3%	2		
09:20	0	0	0	0	0	0	0.0%	3		
09:30	0	0	0	0	0	0	0.0%	3		
14:30	0	0	0	0	0	0	0.0%	3		
14:40	0	0	0	0	0	0	0.0%	3		
14:50	1	0	0	0	0	0	33.3%	2		
15:00	3	0	0	0	0	0	100.0%	0		
15:10	3	0	0	0	0	0	100.0%	0		
15:20	0	0	0	0	0	0	0.0%	3		
15:30	0	0	0	0	0	0	0.0%	3		
15:40	0	0	0	0	0	0	0.0%	3		
15:50	0	0	0	0	0	0	0.0%	3		
16:00	0	0	0	0	0	0	0.0%	3		

		BEAT: ROW8								
		LEGAL			ILLEGAL					
	VEI	HICLE TYPE		١	EHICLE TY	PE				
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES		
08:00	0	0	0	0	0	0	0.0%	3		
08:10	0	0	0	0	0	0	0.0%	3		
08:20	0	0	0	0	0	0	0.0%	3		
08:30	0	0	0	0	0	0	0.0%	3		
08:40	0	0	0	0	0	0	0.0%	3		
08:50	0	0	0	0	0	0	0.0%	3		
09:00	0	0	0	0	0	0	0.0%	3		
09:10	0	0	0	0	0	0	0.0%	3		
09:20	0	0	0	0	0	0	0.0%	3		
09:30	0	0	0	0	0	0	0.0%	3		
14:30	0	0	0	0	0	0	0.0%	3		
14:40	0	0	0	0	0	0	0.0%	3		
14:50	0	0	0	0	0	0	0.0%	3		
15:00	0	0	0	0	0	0	0.0%	3		
15:10	0	0	0	0	0	0	0.0%	3		
15:20	0	0	0	0	0	0	0.0%	3		
15:30	0	0	0	0	0	0	0.0%	3		
15:40	0	0	0	0	0	0	0.0%	3		
15:50	0	0	0	0	0	0	0.0%	3		
16:00	0	0	0	0	0	0	0.0%	3		



DAY: Wednesday

Notes

		BEAT: ROW1							
		LEGAL			ILLEGAL				
	VE	HICLE TYPE		,	VEHICLE TYF	'E			
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES	
08:00	0	0	0	0	0	0	0.0%	4	
08:10	0	0	0	0	0	0	0.0%	4	
08:20	0	0	0	0	0	0	0.0%	4	
08:30	0	0	0	0	0	0	0.0%	4	
08:40	0	0	0	0	0	0	0.0%	4	
08:50	2	0	0	0	0	0	50.0%	2	
09:00	1	0	0	0	0	0	25.0%	3	
09:10	1	0	0	0	0	0	25.0%	3	
09:20	1	0	0	0	0	0	25.0%	3	
09:30	1	0	0	0	0	0	25.0%	3	
14:30	0	0	0	0	0	0	0.0%	4	
14:40	0	0	0	0	0	0	0.0%	4	
14:50	0	0	0	0	0	0	0.0%	4	
15:00	0	0	0	0	0	0	0.0%	4	
15:10	4	0	0	0	0	0	100.0%	0	
15:20	4	0	0	0	0	0	100.0%	0	
15:30	1	0	0	0	0	0	25.0%	3	
15:40	0	0	0	0	0	0	0.0%	4	
15:50	0	0	0	0	0	0	0.0%	4	
16:00	0	0	0	0	0	0	0.0%	4	

			Ī					
		LEGAL			ILLEGAL			
	VE	VEHICLE TYPE VEHICLE TYPE						
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	5
08:10	0	0	0	0	0	0	0.0%	5
08:20	0	0	0	0	0	0	0.0%	5
08:30	1	0	0	0	0	0	20.0%	4
08:40	0	0	0	0	0	0	0.0%	5
08:50	0	0	0	0	0	0	0.0%	5
09:00	0	0	0	0	0	0	0.0%	5
09:10	0	0	0	0	0	0	0.0%	5
09:20	0	0	0	0	0	0	0.0%	5
09:30	0	0	0	0	0	0	0.0%	5
14:30	0	1	0	0	0	0	20.0%	4
14:40	0	1	0	0	0	0	20.0%	4
14:50	0	1	0	0	0	0	20.0%	4
15:00	0	1	0	0	0	0	20.0%	4
15:10	1	0	0	0	0	0	20.0%	4
15:20	1	0	0	0	0	0	20.0%	4
15:30	1	0	0	0	0	0	20.0%	4
15:40	0	0	0	0	0	0	0.0%	5
15:50	0	0	0	0	0	0	0.0%	5
16:00	0	0	0	0	0	0	0.0%	5



DAY: Wednesday

Notes

		BEAT: ROW3							
		LEGAL			ILLEGAL				
	VE	HICLE TYPE		,	VEHICLE TYPE				
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES	
08:00	5	0	0	1	0	0	40.0%	9	
08:10	6	0	0	0	0	0	40.0%	9	
08:20	4	0	0	0	0	0	26.7%	11	
08:30	5	0	0	0	0	0	33.3%	10	
08:40	7	0	0	0	0	0	46.7%	8	
08:50	8	0	0	0	0	0	53.3%	7	
09:00	5	0	0	0	0	0	33.3%	10	
09:10	5	0	0	0	0	0	33.3%	10	
09:20	4	0	0	0	0	0	26.7%	11	
09:30	4	0	0	0	0	0	26.7%	11	
14:30	2	0	0	0	0	0	13.3%	13	
14:40	3	0	0	0	0	0	20.0%	12	
14:50	2	0	0	0	0	0	13.3%	13	
15:00	8	0	0	0	0	0	53.3%	7	
15:10	7	0	0	0	0	0	46.7%	8	
15:20	8	0	0	1	0	0	60.0%	6	
15:30	2	0	0	0	0	0	13.3%	13	
15:40	1	0	0	0	0	0	6.7%	14	
15:50	2	0	0	0	0	0	13.3%	13	
16:00	2	0	0	0	0	0	13.3%	13	

		LEGAL			ILLEGAL			
	VE	HICLE TYPE		VEHICLE TYPE				
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	2	0	0	0	0	0	18.2%	9
08:10	2	0	0	0	0	0	18.2%	9
08:20	2	0	0	0	0	0	18.2%	9
08:30	2	0	0	0	0	0	18.2%	9
08:40	2	0	0	0	0	0	18.2%	9
08:50	2	0	0	0	0	0	18.2%	9
09:00	2	0	0	0	0	0	18.2%	9
09:10	1	0	0	0	0	0	9.1%	10
09:20	1	0	0	0	0	0	9.1%	10
09:30	1	0	0	0	0	0	9.1%	10
14:30	1	0	0	0	0	0	9.1%	10
14:40	2	0	0	0	0	0	18.2%	9
14:50	3	0	0	0	0	0	27.3%	8
15:00	4	0	0	0	0	0	36.4%	7
15:10	4	0	0	0	0	0	36.4%	7
15:20	4	0	0	0	0	0	36.4%	7
15:30	2	0	0	0	0	0	18.2%	9
15:40	2	0	0	0	0	0	18.2%	9
15:50	2	0	0	0	0	0	18.2%	9
16:00	3	0	0	0	0	0	27.3%	8



DAY: Wednesday

Notes

		BEAT: ROW5								
		LEGAL			ILLEGAL					
	VE	HICLE TYPE		,	VEHICLE TYP	Έ				
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES		
08:00	2	0	0	0	0	0	22.2%	7		
08:10	4	0	0	0	0	0	44.4%	5		
08:20	5	0	0	0	0	0	55.6%	4		
08:30	6	0	0	0	0	0	66.7%	3		
08:40	8	0	0	0	0	0	88.9%	1		
08:50	7	0	0	0	0	0	77.8%	2		
09:00	5	0	0	0	0	0	55.6%	4		
09:10	5	0	0	0	0	0	55.6%	4		
09:20	6	0	1	0	0	0	77.8%	2		
09:30	5	0	1	0	0	0	66.7%	3		
14:30	5	0	0	0	0	0	55.6%	4		
14:40	7	0	0	0	0	0	77.8%	2		
14:50	8	0	0	0	0	0	88.9%	1		
15:00	8	0	0	0	0	0	88.9%	1		
15:10	8	0	0	0	0	0	88.9%	1		
15:20	6	0	0	0	0	0	66.7%	3		
15:30	5	0	0	0	0	0	55.6%	4		
15:40	4	0	0	0	0	0	44.4%	5		
15:50	5	0	0	0	0	0	55.6%	4		
16:00	5	0	0	0	0	0	55.6%	4		

		LEGAL			ILLEGAL			
	VE	HICLE TYPE		,	VEHICLE TYP	E		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	11
08:10	0	0	0	0	0	0	0.0%	11
08:20	0	0	0	0	0	0	0.0%	11
08:30	0	0	0	0	0	0	0.0%	11
08:40	0	0	0	0	0	0	0.0%	11
08:50	0	0	0	0	0	0	0.0%	11
09:00	0	0	0	0	0	0	0.0%	11
09:10	0	0	0	0	0	0	0.0%	11
09:20	0	0	0	0	0	0	0.0%	11
09:30	0	0	0	0	0	0	0.0%	11
14:30	1	0	0	0	0	0	9.1%	10
14:40	1	0	0	0	0	0	9.1%	10
14:50	1	0	0	0	0	0	9.1%	10
15:00	1	0	0	0	0	0	9.1%	10
15:10	1	0	0	0	0	0	9.1%	10
15:20	1	0	0	0	0	0	9.1%	10
15:30	1	0	0	0	0	0	9.1%	10
15:40	1	0	0	0	0	0	9.1%	10
15:50	1	0	0	0	0	0	9.1%	10
16:00	1	0	0	0	0	0	9.1%	10



DAY: Wednesday

Notes

		BEAT: ROW7								
		LEGAL			ILLEGAL					
	VE	HICLE TYPE		1	VEHICLE TYP	Έ				
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES		
08:00	2	0	0	0	0	0	66.7%	1		
08:10	0	0	0	0	0	0	0.0%	3		
08:20	0	0	0	0	0	0	0.0%	3		
08:30	2	0	0	0	0	0	66.7%	1		
08:40	3	0	0	0	0	0	100.0%	0		
08:50	0	0	0	0	0	0	0.0%	3		
09:00	0	0	0	0	0	0	0.0%	3		
09:10	0	0	0	0	0	0	0.0%	3		
09:20	0	0	0	0	0	0	0.0%	3		
09:30	0	0	0	0	0	0	0.0%	3		
14:30	0	0	0	0	0	0	0.0%	3		
14:40	0	0	0	0	0	0	0.0%	3		
14:50	1	0	0	0	0	0	33.3%	2		
15:00	3	0	0	0	0	0	100.0%	0		
15:10	3	0	0	0	0	0	100.0%	0		
15:20	1	0	0	0	0	0	33.3%	2		
15:30	0	0	0	0	0	0	0.0%	3		
15:40	0	0	0	0	0	0	0.0%	3		
15:50	0	0	0	0	0	0	0.0%	3		
16:00	0	0	0	0	0	0	0.0%	3		

			BEAT:	ROW8				
		LEGAL			ILLEGAL			
	VE	HICLE TYPE			VEHICLE TYPE			
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	3
08:10	0	0	0	0	0	0	0.0%	3
08:20	0	0	0	0	0	0	0.0%	3
08:30	0	0	0	0	0	0	0.0%	3
08:40	0	0	0	0	0	0	0.0%	3
08:50	0	0	0	0	0	0	0.0%	3
09:00	0	0	0	0	0	0	0.0%	3
09:10	0	0	0	0	0	0	0.0%	3
09:20	0	0	0	0	0	0	0.0%	3
09:30	0	0	0	0	0	0	0.0%	3
14:30	0	0	0	0	0	0	0.0%	3
14:40	0	0	0	0	0	0	0.0%	3
14:50	0	0	0	0	0	0	0.0%	3
15:00	0	0	0	0	0	0	0.0%	3
15:10	0	0	0	0	0	0	0.0%	3
15:20	0	0	0	0	0	0	0.0%	3
15:30	0	0	0	0	0	0	0.0%	3
15:40	0	0	0	0	0	0	0.0%	3
15:50	0	0	0	0	0	0	0.0%	3
16:00	0	0	0	0	0	0	0.0%	3



STREET NAME: Homer Road DATE: 10/01/2017

DAY: Tuesday

Notes

		BEAT: HOM1								
		LEGAL			ILLEGAL		1			
	VE	HICLE TYPE		,	VEHICLE TYP	Έ				
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES		
08:00	0	0	0	0	0	0	0.0%	9		
08:10	0	0	0	0	0	0	0.0%	9		
08:20	0	0	0	0	0	0	0.0%	9		
08:30	0	0	0	0	0	0	0.0%	9		
08:40	5	0	0	0	0	0	55.6%	4		
08:50	5	0	0	0	0	0	55.6%	4		
09:00	2	0	0	0	0	0	22.2%	7		
09:10	1	0	0	0	0	0	11.1%	8		
09:20	1	0	0	0	0	0	11.1%	8		
09:30	1	0	0	0	0	0	11.1%	8		
14:30	1	0	0	0	0	0	11.1%	8		
14:40	1	0	0	0	0	0	11.1%	8		
14:50	2	0	0	0	0	0	22.2%	7		
15:00	3	0	0	0	0	0	33.3%	6		
15:10	6	0	0	0	0	0	66.7%	3		
15:20	7	0	0	0	0	0	77.8%	2		
15:30	1	0	0	0	0	0	11.1%	8		
15:40	0	0	0	0	0	0	0.0%	9		
15:50	0	0	0	0	0	0	0.0%	9		
16:00	0	0	0	0	0	0	0.0%	9		

		BEAT: HOM2							
		LEGAL			ILLEGAL		Ī		
	VE	HICLE TYPE		,	VEHICLE TYP	Έ			
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES	
08:00	0	0	0	0	0	0	0.0%	8	
08:10	0	0	0	0	0	0	0.0%	8	
08:20	0	0	0	0	0	0	0.0%	8	
08:30	0	0	0	0	0	0	0.0%	8	
08:40	0	0	0	0	0	0	0.0%	8	
08:50	0	0	0	0	0	0	0.0%	8	
09:00	0	0	0	0	0	0	0.0%	8	
09:10	0	0	0	0	0	0	0.0%	8	
09:20	0	0	0	0	0	0	0.0%	8	
09:30	0	0	0	0	0	0	0.0%	8	
14:30	0	0	0	0	0	0	0.0%	8	
14:40	0	0	0	0	0	0	0.0%	8	
14:50	0	0	0	0	0	0	0.0%	8	
15:00	0	0	0	0	0	0	0.0%	8	
15:10	0	0	0	0	0	0	0.0%	8	
15:20	0	0	0	0	0	0	0.0%	8	
15:30	0	0	0	0	0	0	0.0%	8	
15:40	0	0	0	0	0	0	0.0%	8	
15:50	0	0	0	0	0	0	0.0%	8	
16:00	0	0	0	0	0	0	0.0%	8	



STREET NAME: Homer Road DATE: 11/01/2017

DAY: Wednesday

Notes

			BEAT:	ном1				
		LEGAL			ILLEGAL			
	VE	HICLE TYPE		1	/EHICLE TYP			
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	1	0	0	0	0	0	11.1%	8
08:10	0	0	0	0	0	0	0.0%	9
08:20	0	0	0	0	0	0	0.0%	9
08:30	1	0	0	0	0	0	11.1%	8
08:40	8	0	0	0	0	0	88.9%	1
08:50	7	0	0	0	0	0	77.8%	2
09:00	1	0	0	0	0	0	11.1%	8
09:10	1	0	0	0	0	0	11.1%	8
09:20	1	0	0	0	0	0	11.1%	8
09:30	1	0	0	0	0	0	11.1%	8
14:30	1	0	0	0	0	0	11.1%	8
14:40	2 3	0	0	0	0	0	22.2%	7
14:50	3	0	0	0	0	0	33.3%	6
15:00	5	0	0	0	0	0	55.6%	4
15:10	6	0	0	0	0	0	66.7%	3
15:20	6	0	0	0	0	0	66.7%	3
15:30	1	0	0	0	0	0	11.1%	8
15:40	0	0	0	0	0	0	0.0%	9
15:50	0	0	0	0	0	0	0.0%	9
16:00	0	0	0	0	0	0	0.0%	9

[BEAT:	НОМ2			Ī	
		LEGAL			ILLEGAL		Ī	
	VEHICLE TYPE			,	VEHICLE TYP			
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	8
08:10	0	0	0	0	0	0	0.0%	8
08:20	0	0	0	0	0	0	0.0%	8
08:30	0	0	0	0	0	0	0.0%	8
08:40	1	0	0	0	0	0	12.5%	7
08:50	1	0	0	0	0	0	12.5%	7
09:00	1	0	0	0	0	0	12.5%	7
09:10	1	0	0	0	0	0	12.5%	7
09:20	1	0	0	0	0	0	12.5%	7
09:30	1	0	0	0	0	0	12.5%	7
14:30	1	0	0	0	0	0	12.5%	7
14:40	1	0	0	0	0	0	12.5%	7
14:50	1	0	0	0	0	0	12.5%	7
15:00	1	0	0	0	0	0	12.5%	7
15:10	1	0	0	0	0	0	12.5%	7
15:20	3	0	0	0	0	0	37.5%	5
15:30	1	0	0	0	0	0	12.5%	7
15:40	0	0	0	0	0	0	0.0%	8
15:50	0	0	0	0	0	0	0.0%	8
16:00	0	0	0	0	0	0	0.0%	8



STREET NAME: Essex Road DATE: 10/01/2017

DAY: Tuesday

Notes

		BEAT: ESS1									
		LEGAL			ILLEGAL		1				
	VE	HICLE TYPE		,	VEHICLE TYP						
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES			
08:00	1	0	0	0	0	0	3.6%	27			
08:10	0	0	0	0	0	0	0.0%	28			
08:20	0	0	0	0	0	0	0.0%	28			
08:30	0	0	0	0	0	0	0.0%	28			
08:40	0	0	0	0	0	0	0.0%	28			
08:50	0	0	0	0	0	0	0.0%	28			
09:00	0	0	0	0	0	0	0.0%	28			
09:10	0	0	0	0	0	0	0.0%	28			
09:20	0	0	0	0	0	0	0.0%	28			
09:30	0	0	0	0	0	0	0.0%	28			
14:30	3	0	0	0	0	0	10.7%	25			
14:40	3	0	0	0	0	0	10.7%	25			
14:50	3	0	0	0	0	0	10.7%	25			
15:00	3	0	0	0	0	0	10.7%	25			
15:10	3	0	0	0	0	0	10.7%	25			
15:20	3	0	0	0	0	0	10.7%	25			
15:30	3	0	0	0	0	0	10.7%	25			
15:40	3	0	0	0	0	0	10.7%	25			
15:50	4	0	0	0	0	0	14.3%	24			
16:00	4	0	0	0	0	0	14.3%	24			

			BEAT:	ESS2			1	
		LEGAL			ILLEGAL			
	VE	HICLE TYPE		,	VEHICLE TYP			
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	1	0	0	0	0	0	3.4%	28
08:10	1	0	0	0	0	0	3.4%	28
08:20	1	0	0	0	0	0	3.4%	28
08:30	1	0	0	0	0	0	3.4%	28
08:40	1	0	0	0	0	0	3.4%	28
08:50	1	0	0	0	0	0	3.4%	28
09:00	0	0	0	0	0	0	0.0%	29
09:10	0	0	0	0	0	0	0.0%	29
09:20	0	0	0	0	0	0	0.0%	29
09:30	0	0	0	0	0	0	0.0%	29
14:30	0	0	0	0	0	0	0.0%	29
14:40	0	0	0	0	0	0	0.0%	29
14:50	0	0	0	0	0	0	0.0%	29
15:00	0	0	0	0	0	0	0.0%	29
15:10	0	0	0	0	0	0	0.0%	29
15:20	0	0	0	0	0	0	0.0%	29
15:30	0	0	0	0	0	0	0.0%	29
15:40	0	0	0	0	0	0	0.0%	29
15:50	0	0	0	0	0	0	0.0%	29
16:00	0	0	0	0	0	0	0.0%	29



STREET NAME: Essex Road DATE: 10/01/2017

DAY: Tuesday

Notes

		BEAT: ESS3								
		LEGAL			ILLEGAL					
	VE	HICLE TYPE		,	VEHICLE TYP					
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES		
08:00	0	0	0	0	0	0	0.0%	13		
08:10	0	0	0	0	0	0	0.0%	13		
08:20	0	0	0	0	0	0	0.0%	13		
08:30	0	0	0	0	0	0	0.0%	13		
08:40	0	0	0	0	0	0	0.0%	13		
08:50	0	0	0	0	0	0	0.0%	13		
09:00	0	0	0	0	0	0	0.0%	13		
09:10	0	0	0	0	0	0	0.0%	13		
09:20	0	0	0	0	0	0	0.0%	13		
09:30	0	0	0	0	0	0	0.0%	13		
14:30	0	0	0	0	0	0	0.0%	13		
14:40	0	0	0	0	0	0	0.0%	13		
14:50	0	0	0	0	0	0	0.0%	13		
15:00	0	0	0	0	0	0	0.0%	13		
15:10	0	0	0	0	0	0	0.0%	13		
15:20	1	0	0	0	0	0	7.7%	12		
15:30	0	0	0	0	0	0	0.0%	13		
15:40	0	0	0	0	0	0	0.0%	13		
15:50	0	0	0	0	0	0	0.0%	13		
16:00	0	0	0	0	0	0	0.0%	13		

		BEAT: ESS4								
		LEGAL			ILLEGAL]			
	VE	HICLE TYPE		,	VEHICLE TYP	E				
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES		
08:00	1	0	0	0	0	0	7.7%	12		
08:10	1	0	0	0	0	0	7.7%	12		
08:20	1	0	0	0	0	0	7.7%	12		
08:30	3	0	0	0	0	0	23.1%	10		
08:40	8	0	0	0	0	0	61.5%	5		
08:50	5	0	0	0	0	0	38.5%	8		
09:00	1	0	0	0	0	0	7.7%	12		
09:10	1	0	0	0	0	0	7.7%	12		
09:20	1	0	0	0	0	0	7.7%	12		
09:30	1	0	0	0	0	0	7.7%	12		
14:30	1	0	0	0	0	0	7.7%	12		
14:40	1	0	0	0	0	0	7.7%	12		
14:50	3	0	0	0	0	0	23.1%	10		
15:00	3	0	0	0	0	0	23.1%	10		
15:10	9	0	0	0	0	0	69.2%	4		
15:20	11	0	0	0	0	0	84.6%	2		
15:30	2	0	0	0	0	0	15.4%	11		
15:40	1	0	0	0	0	0	7.7%	12		
15:50	1	0	0	0	0	0	7.7%	12		
16:00	0	0	0	0	0	0	0.0%	13		



STREET NAME: Essex Road DATE: 11/01/2017

DAY: Wednesday

Notes

			BEAT:	ESS1				
		LEGAL			ILLEGAL			
	VI	HICLE TYPE		,	VEHICLE TYP	PE .		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	28
08:10	0	0	0	0	0	0	0.0%	28
08:20	0	0	0	0	0	0	0.0%	28
08:30	0	0	0	0	0	0	0.0%	28
08:40	0	0	0	0	0	0	0.0%	28
08:50	0	0	0	0	0	0	0.0%	28
09:00	0	0	0	0	0	0	0.0%	28
09:10	0	0	0	0	0	0	0.0%	28
09:20	0	0	0	0	0	0	0.0%	28
09:30	0	0	0	0	0	0	0.0%	28
14:30	1	0	0	0	0	0	3.6%	27
14:40	1	0	0	0	0	0	3.6%	27
14:50	1	0	0	0	0	0	3.6%	27
15:00	0	0	0	0	0	0	0.0%	28
15:10	0	0	0	0	0	0	0.0%	28
15:20	1	0	0	0	0	0	3.6%	27
15:30	0	0	0	0	0	0	0.0%	28
15:40	1	0	0	0	0	0	3.6%	27
15:50	1	0	0	0	0	0	3.6%	27
16:00	1	0	0	0	0	0	3.6%	27

		BEAT: ESS2									
		LEGAL			ILLEGAL						
	VE	HICLE TYPE		VEHICLE TYPE							
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES			
08:00	0	0	0	0	0	0	0.0%	29			
08:10	0	0	0	0	0	0	0.0%	29			
08:20	0	0	0	0	0	0	0.0%	29			
08:30	0	0	0	0	0	0	0.0%	29			
08:40	0	0	0	0	0	0	0.0%	29			
08:50	0	0	0	0	0	0	0.0%	29			
09:00	0	0	0	0	0	0	0.0%	29			
09:10	0	0	0	0	0	0	0.0%	29			
09:20	0	0	0	0	0	0	0.0%	29			
09:30	0	0	0	0	0	0	0.0%	29			
14:30	0	0	0	0	0	0	0.0%	29			
14:40	0	0	0	0	0	0	0.0%	29			
14:50	0	0	0	0	0	0	0.0%	29			
15:00	0	0	0	0	0	0	0.0%	29			
15:10	0	0	0	0	0	0	0.0%	29			
15:20	0	0	0	0	0	0	0.0%	29			
15:30	1	0	0	0	0	0	3.4%	28			
15:40	1	0	0	0	0	0	3.4%	28			
15:50	1	0	0	0	0	0	3.4%	28			
16:00	1	0	0	0	0	0	3.4%	28			



STREET NAME: Essex Road DATE: 11/01/2017

DAY: Wednesday

Notes

			BEAT:	ESS3				
		LEGAL			ILLEGAL			
	VE	HICLE TYPE		,	VEHICLE TYP	Έ		
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES
08:00	0	0	0	0	0	0	0.0%	13
08:10	0	0	0	0	0	0	0.0%	13
08:20	0	0	0	0	0	0	0.0%	13
08:30	0	0	0	0	0	0	0.0%	13
08:40	0	0	0	0	0	0	0.0%	13
08:50	0	0	0	0	0	0	0.0%	13
09:00	0	0	0	0	0	0	0.0%	13
09:10	0	0	0	0	0	0	0.0%	13
09:20	0	0	0	0	0	0	0.0%	13
09:30	0	0	0	0	0	0	0.0%	13
14:30	0	0	0	0	0	0	0.0%	13
14:40	0	0	0	0	0	0	0.0%	13
14:50	0	0	0	0	0	0	0.0%	13
15:00	0	0	0	0	0	0	0.0%	13
15:10	0	0	0	0	0	0	0.0%	13
15:20	0	0	0	0	0	0	0.0%	13
15:30	0	0	0	0	0	0	0.0%	13
15:40	0	0	0	0	0	0	0.0%	13
15:50	0	0	0	0	0	0	0.0%	13
16:00	0	0	0	0	0	0	0.0%	13

		BEAT: ESS4									
		LEGAL			ILLEGAL						
	VE	HICLE TYPE		VEHICLE TYPE							
TIME BEGINNING	CAR	LGV	HGV	CAR	LGV	HGV	PEAK %FULL	MIN. FREE SPACES			
08:00	0	0	0	0	0	0	0.0%	13			
08:10	0	0	0	0	0	0	0.0%	13			
08:20	0	0	0	0	0	0	0.0%	13			
08:30	0	0	0	0	0	0	0.0%	13			
08:40	3	0	0	0	0	0	23.1%	10			
08:50	1	0	0	0	0	0	7.7%	12			
09:00	1	0	0	0	0	0	7.7%	12			
09:10	0	0	0	0	0	0	0.0%	13			
09:20	0	0	0	0	0	0	0.0%	13			
09:30	0	0	0	0	0	0	0.0%	13			
14:30	0	0	0	0	0	0	0.0%	13			
14:40	0	0	0	0	0	0	0.0%	13			
14:50	0	0	0	0	0	0	0.0%	13			
15:00	3	0	0	0	0	0	23.1%	10			
15:10	7	0	0	0	0	0	53.8%	6			
15:20	6	0	0	0	0	0	46.2%	7			
15:30	1	0	0	0	0	0	7.7%	12			
15:40	0	0	0	0	0	0	0.0%	13			
15:50	1	0	0	0	0	0	7.7%	12			
16:00	1	0	0	0	0	0	7.7%	12			

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