PROPOSED LIDL FOODSTORE

Former Hayes Pool and Fitness Centre,
Central Avenue, Hayes Town

Transport Assessment
On behalf of Lidl UK

November 2015

Gateway TSP

Project:	Proposed Lidl Foodstore Former Hayes Pool and Fitness Centre, Central Avenue, Hayes Town
Client:	Lidl UK
Document:	Transport Assessment
Gateway TSP ref:	MF/LF/15-0302 TA v1.0.docx
Issue date:	5th November 2015
Status:	v1.0
Authorised by:	LF

Gateway TSP

Transport Planning & Design

Surrey Technology Centre
40 Occam Road
Guildford
GU2 7YG

01483 685220
admin@gateway-tsp.co.uk
www.gateway-tsp.co.uk

CONTENTS

Figures

Appendices

1 INTRODUCTION

1.1 Gateway TSP is instructed by Lidl UK to prepare this Transport Assessment (TA) to accompany a planning application for a new foodstore at the former Hayes Pool and Fitness Centre site, Central Avenue, Hayes Town. This report considers the highways and transport matters relating to the proposed development and should be read in conjunction with the Draft Travel Plan (DTP), also prepared by Gateway TSP.

1.2 The application site occupies the former council owned Hayes swimming pool site and extends to 0.971 hectares. Following the opening of the new Botwell Green Sports and Leisure Centre in May 2010, the former pool building was demolished by the Council in order to encourage its redevelopment for alternative uses. The site is currently closed and surrounded by hoarding.

1.3 The site is bounded to the east by Central Avenue and by Botwell Lane to the south. To the west Botwell Lane meets Church Road (heading north) at a roundabout junction. There are residential properties to the north of the site at Holmbury Gardens and a pay and display car park accessed from Central Avenue. Existing access to the site is provided from a shared access with the Botwell Lane Pay & Display car park on Central Avenue.

1.4 Outline planning permission was granted by the Council in August 2012 (planning reference 1942/APP/2010/31) for the redevelopment of the entire former swimming pool site to provide 72 residential units with associated access, amenity space, landscaping and car parking, including demolition of the existing swimming pool. This application has not been progressed further as it failed to attract market interest at a level deemed acceptable by the Council.

1.5 A further planning application (reference 1942/APP/2013/3565) was made for a 1,407 square metre sales floor area store Lidl foodstore on the eastern part of the site, which was granted planning permission in September 2014. Permission was granted for the foodstore with 62 car parking spaces.

1.6 The development proposals are for a 2,824 square metre gross external floorspace Lidl foodstore providing a net sales floor area of 1,689 square metres. Access would be provided from a new priority junction onto Church Road. Parking is proposed in accordance with adopted standards with a total of 146 spaces including Blue and Brown Badge Holder spaces, dual use electric vehicle charging spaces and provision for Parent & Child spaces.

1.7 This Transport Assessment provides an update to the previously accepted Transport Assessment prepared for the previous Lidl foodstore application (reference 1942/APP/2013/3565).

1.8 A pre-application meeting was help with Officers at the London Borough of Hillingdon on the 14th May 2015, in which Highway Officers from LBH were in attendance. Following this meeting, the formal pre-application comments were received on 18th September 2015 and all points raised in relation to transport and highways have been addressed within this TA.

1.9 The remainder of this Transport Assessment will be set out as follows:

i) Section 2 considers relevant transport policy at a national, regional and local level;

ii) Section 3 provides a description of the existing site, transport networks and traffic conditions relevant to the development proposals;

iii) Section 4 explains the development proposals for the site;

iv) Section 5 sets out the transport impact of the development proposals;

v) Section 6 provides the junction capacity assessment;

vi) Section 7 outlines the mitigation measures proposed; and

vii) Section 8 provides the summary and conclusions.

2 TRANSPORT POLICY

2.1 Statutory transport policy and guidance relevant to the proposed development is found within the following documents:

i) The National Planning Policy Framework (NPPF);

ii) The London Plan, Spatial Development Strategy for Greater London; and

iii) The London Borough of Hillingdon Local Plan: Part 1 – Strategic Policies and saved polices within the Unitary Development Plan.

National Policy

2.2 The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied.

2.3 The NPPF presumes in favour of sustainable development and is a material consideration in planning decisions. Twelve core land-use planning principles are put forward to underpin both plan-making and decision-taking, one of which is to *"actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable."*

2.4 Paragraph 32 addresses the relationship between development and sustainable transport as follows:

> *"All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:*

- *the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*

- *safe and suitable access to the site can be achieved for all people; and*

- *improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."*

2.5 Paragraph 35 suggests that developments should be located and designed where practical to, among other things, give priority to pedestrian and cycle movements, have access to high quality public transport facilities, create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians and consider the needs of people with disabilities by all modes of transport.

2.6 It is noted at paragraph 36 that travel plans will provide a key tool in facilitating these objectives and all developments that generate significant amounts of movement should provide one.

2.7 Paragraph 37 encourages planning policies that aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities.

2.8 Off-street parking provision is referred to by paragraph 39, which says that in setting local parking standards for development, local planning authorities should take into account accessibility; the type, mix and use of the development; the availability of and opportunities for public transport; local car ownership levels; and an overall need to reduce the use of high-emission vehicles.

2.9 In addition to paragraph 39 of the NPPF, a statement by Eric Pickles on the 25th March 2015 stated that at a National level it is now considered that:

> *"Local planning authorities should only impose local parking standards for residential and non-residential development where there is clear and compelling justification that it is necessary to manage their local road network."*

Regional Policy

2.10 'The London Plan; spatial development strategy for London consolidated with alterations since 2011' including the Further Alterations to the London Plan (FALP) document was adopted by the Mayor of London in March 2015. It sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.

2.11 One of the Mayor's six objectives for London, which is reiterated in Policy 1.1 in terms of delivering the strategic vision and objectives for London is:

> *"A city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities with an efficient and effective transport system which actively encourages more walking and cycling, makes better use of the Thames and supports delivery of all the objectives of this Plan."*

2.12 Policy 6.1 identifies the strategic approach to integrating transport and development and states that the Mayor will work with relevant patterns to encourage the closer integration of transport and development by:

a. *"Encouraging patterns and nodes of development that reduce the need to travel, especially by car;*

b. *Seeking to improve the capacity and accessibility of public transport, walking and cycling, particularly in areas of greatest demand;*

c. Supporting development that generates high levels of trips at locations with high levels of public transport accessibility and/or capacity, either currently or via committed, funded improvements including, where appropriate, those provided by developers through the use of planning obligations; and

g. supporting measure that encourage shifts to more sustainable modes and appropriate demand management."

2.13 Policy 6.3 considers the assessment of effects of development on transport capacity and states:

"A. Development proposals should ensure that impacts on transport capacity and the transport network, at both a corridor and local level, are fully assessed. Development should not adversely affect safety on the transport network…

C. Transport assessments will be required in accordance with TfL's Transport Assessment Best Practice Guidance for major planning applications. Workplace and/or residential travel plans should be provided for planning applications exceeding the thresholds in, and produced in accordance with, the relevant TfL guidance. Construction logistics plans and delivery and servicing plans should be secured in line with the London Freight Plan and should be co-ordinated with travel plans."

Local Policy

2.14 Local policy is contained within the emerging Hillingdon Local Plan, with Part 1 the Strategic Policies document adopted in November 2012.

2.15 Policy T1 relates to accessible local destinations, which is the policy behind Strategic Objective 18 which identifies the Council objective to improve access to a variety of land uses within the Borough. Policy T1 states:

> *"The Council will steer development to the most appropriate locations in order to reduce their impact on the transport network. All development should encourage access by sustainable travel modes and include good cycling and walking provision.*
>
> *The Council will ensure access to local destinations which provide services and amenities."*

2.16 In respect of public transport interchanges, policy T2 states:

> *"The Council will facilitate improved public transport interchanges at Uxbridge, Hayes, West Drayton, Heathrow Airport, West Ruislip and other locations as appropriate in the future. These interchanges will accommodate measures to encourage subsequent shorter journeys to be completed on foot or by cycle."*

2.17 Policy T3 relates to improving sustainable transport links and states the Council objective to:

> *"Improve north-south public transport links in the borough and link residential areas directly with employment areas and transport interchanges."*

2.18 Specific transport related polices are also provided within the Hillingdon Unitary Development Plan saved policies.

2.19 Policy AM2 relates to new development proposals and states:

> *"All proposals for development will be assessed against:*

(i) Their contribution to traffic generation and their impact on congestion, particularly on the principal road network as defined in paragraph 14.14 of the plan; and

(ii) The present and potential availability of public transport and its capacity to meet increased demand."

2.20 In respect of cycling, policy AM9 states that the Council will:

"Promote secure, attractive and adequate cycle parking facilities in the borough's town centres, public transport interchanges and at other major attractions and will require development proposals to include clearly visible, well-designed, covered, secure and accessible bicycle parking for users of the development and, where appropriate, for the general public."

2.21 In respect of car parking, policy AM14 states that developments should accord with the Council's adopted car parking standards and AM15 identifies the need to provide conveniently located reserved spaces for disabled persons in accordance with the Council's adopted parking standards.

Overview

2.22 National, regional and local level transport policy clearly encourages new development to be located in areas that are readily accessible on foot, cycle and by public transport, making use of available sites within built up locations.

2.23 The proposed Lidl foodstore offers a realistic choice of access by public transport, walking and cycling. A new food retail offer here would also reduce the need for travel to other, more distant stores, and facilitate more efficient 'top-up' shopping. The site further benefits from its location close to the principal road network, enabling easy access for commercial vehicles away from sensitive local access roads.

3 EXISTING CONDITIONS

Site Location

3.1 The site is located in Hayes town centre, within the London Borough of Hillingdon. Hayes is a district town which is centrally located with Southall to the east, Harlington to the south, West Drayton to the west, Yeading to the north and Hillingdon and Uxbridge to the north-west. The strategic site location is shown in **Figure 3.1**.

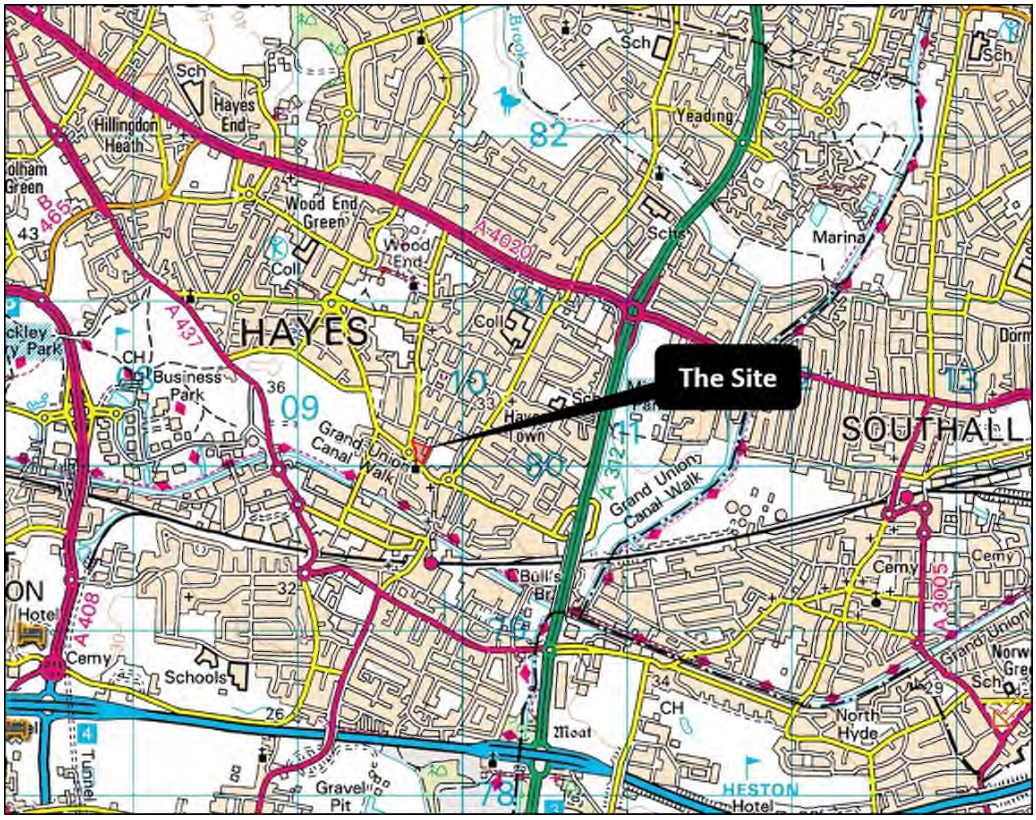


Figure 3.1: Strategic Location Plan

3.2 The site is located in an area of mixed land uses, with Hayes principal shopping area along Station Road and Botwell Lane located to the south-east of the site. Residential developments are located to the north and west, the Botwell Green Sports and Leisure Centre to the east along with Hayes Bowls Club and a primary school, church and mixed industrial buildings to the south/south-west.

3.3 The site has an existing frontage onto Central Avenue, a local road connecting Botwell Green to the south with the A4020 Uxbridge Road to the north via a left-in/left-out junction arrangement. Central Avenue is a 20mph traffic calmed road which runs parallel to Coldharbour Lane located to the east. Coldharbour Lane provides an all movements access onto the A4020 Uxbridge Road and connects to Botwell Lane at a roundabout junction to the south.

3.4 To the south and west, the site is bounded by Botwell Lane, which connects to Coldharbour Lane and Pump Lane at a mini-roundabout in the east. Pump Lane provides a strategic connection to the principal road network of the A312 The Parkway to the east whilst Coldharbour Lane provides a connection to the A4020 Uxbridge Road to the north. The Parkway (A312) provides a connection south to the M4 at junction 3, the A4 and A30 whilst to the north it connects to the A4020 and A40.

3.5 Botwell Lane passes through the northern section of Hayes town centre and provides two signalised pedestrian crossings over the carriageway to connect to the principal shopping area along Station Road to the south. Emergency access only is permitted through a gate between Botwell Lane and Station Road although the link is fully accessible for pedestrians and cyclists. Hayes & Harlington railway station is located along Station Road to the south of the shopping area.

3.6 To the west, Central Avenue meets Botwell Lane at a priority junction located immediately to the west of a pedestrian signalised crossing over Botwell Lane. Botwell Lane continues in a north-west direction to a roundabout with Church Lane, which heads north to the A4020 Uxbridge Road. Beyond this roundabout Botwell Lane continues north-west into Hayes. A further roundabout junction is present with Botwell Common Road, which provides a link south-west to the A437 Dawley Road. The site in relation to the local area is shown in **Figure 3.2**.

Figure 3.2: Local Area Plan

Site History

3.7 The application site occupies the former council owned Hayes swimming pool site and extends to 0.971 hectares. Following the opening of the new Botwell Green Sports and Leisure Centre in May 2010, the former pool building was demolished by the Council in order to encourage its redevelopment for alternative uses. The pool building has since been demolished and the site remains vacant.

3.8 In August 2012, outline planning consent was granted for a 72 dwelling residential development on the entire former swimming pool site (planning reference 1942/APP/2010/31). It retained the existing shared access onto Central Avenue and also provided pedestrian links from Botwell Lane.

3.9 In September 2014, planning consent was granted (reference 1942/APP/2013/3565) for a Lidl foodstore on a portion of the site (0.517 hectares). The consent included a Lidl foodstore of 2,160 square metres gross external area with a sales are of 1,407 square metres, 62 car parking spaces and a dedicated Lidl access onto Central Avenue.

Surrounding Area

3.10 The surrounding area is mixed given the location on the edge of Hayes town centre. Botwell Green Sports and Leisure Centre is located to the east with the centre's egress located just to the south of the application site access on Central Avenue. Hayes Bowls Club is located to the south-east of the site.

3.11 To the south and west, the site is bounded by Botwell Lane and beyond this a mixture of residential, Botwell House Roman Catholic Primary School, a church and industrial uses.

3.12 Immediately to the north of the site is the 57 space Botwell Green Pay & Display public car park, accessed from Central Avenue via a shared access arrangement with the former Hayes Pool site. Historically, the junction has provided access to the Hayes Pool car park along with the pay and display car park.

Accessing the Site by Non-Car Modes

Accessibility on Foot

3.13 There are a network of interconnected pedestrian footways that link the site to the surrounding residential areas and to the parade of shops along Station Road, via a signalised pedestrian crossings over Botwell Lane.

3.14 A signalised pedestrian crossing is provided in close proximity to the junction of Botwell Lane and Central Avenue offering an opportunity to cross Botwell Lane adjacent to Botwell House Catholic Primary School. A second signalised crossing is provided approximately 100 metres to the south-east along Botwell Lane adjacent to Station Road.

3.15 A pedestrian crossing is located at the southern end of Church Road approximately 70m south of the proposed site access, with tactile paving and dropped kerbs to meet the level of the carriageway. This provides access across Church Road to the residential streets to the west of the site and bus stops providing access to Uxbridge.

3.16 To the north of the site pedestrian access across Holmbury Gardens is provided with a raised table crossing with tactile paving.

Accessibility by Cycle

3.17 London Cycle Route 88 passes to the east of Hayes Town running parallel with the A312 The Parkway from Cranford in the south towards Yeading in the north. This route provides a continuous off-road route over strategic road junctions of the A4, M4, A437 and A4020.

3.18 London Cycle Route 88A runs parallel route 88 but is an on-road route passing through Hayes and Harlington northbound towards Yeading. Cycle route 88A passes the site along Central Avenue. The route passes south along Central Avenue over Botwell Lane and south along Station Road towards Harlington. This route is identified in the Transport for London Local Cycle Guide 6 as a route signed or marked for cyclist use on a mixture of quieter or busier roads.

3.19 To the north of Central Avenue at the junction with Uxbridge Road the cycle route joins an off-road segregated route that runs parallel to the A4020 Uxbridge Road. A toucan crossing is provided over Uxbridge Road to the west of the junction with Central Avenue which provides access to Shakespeare Avenue to the north where route 88A continues north to Yeading.

3.20 Station Road is the main shopping area within Hayes Town and provides a link for cyclists from Botwell Lane to areas to the south of Grand Union Canal, Hayes & Harlington railway station and a network of off-road cycle routes in the area.

Accessibility by Bus

3.21 The closest bus stops to the proposed development access are located along Church Road with the southbound bus stop (Bus Stop SN) approximately 20 metres north from the site access and the northbound bus stop (Bus stop N) located opposite the site but approximately 150 metres walk (via uncontrolled pedestrian crossing). These stops provide access to bus service numbers H98 and 195 connecting Hayes with Hounslow and Brentford.

3.22 Additional services are provided by bus stops located to the west of the site along Botwell Lane with the south-east bound bus stop (Bus Stop SJ) approximately 220 metres to the west of the site access, and the north-west bound (Bus Stop J) approximately 350 metres further west from the site boundary. These stops provide access to bus service numbers U4 and U5 providing services to Uxbridge.

3.23 A summary of the frequent bus services at the local stops identified above is summarised in Table 3.1.

Service	Route/Destination	Weekday Daytime Frequency	Saturday Daytime Frequency	Sunday Daytime Frequency
H98	Hounslow Bus Station – Hayes & Harlington Station – Uxbridge County Court – Hayes End Kingsway	Every 7-10 minutes	Every 7-10 minutes	Every 15 minutes (approx.)
195	Brentford County Court – Southall – Hayes & Harlington Station – Hayes – Charville Lane Estate	Every 10-13 minutes	Every 12-13 minutes	Every 15 minutes (approx.)
U4	ProLogis Park – Hayes & Harlington Station – Hayes – Hillingdon Hospital – Uxbridge	Every 6-10 minutes	Every 7-10 minutes	Every 15 minutes (approx.)
U5	Hayes & Harlington Station – Hayes – West Drayton Station – Uxbridge	Every 10-13 minutes	Every 12-13 minutes	Every 20 minutes (approx.)

Table 3.1: Summary of Bus Services Available

3.24 Table 3.1 indicates that the site is well served by bus services, with the majority of services operating approximately every 10 minutes, with some more frequent than this. The bus services available provide access to the rail and Underground network, with each service providing a link to Hayes & Harlington railway station.

3.25 The TfL bus spider map of routes in this area is included at **Appendix A**.

Accessibility by Rail

3.26 The closest railway station to the site is Hayes & Harlington, located approximately 750 metres to the south of the site. It is also accessible by bus with all of the local bus services identified in Table 3.1 stopping at the station.

3.27 At present, Hayes & Harlington railway station serves the Heathrow Connect service between Heathrow airport and London Paddington along with other longer distance journeys operated by First Great Western to Oxford or Reading. Table 3.2 provides a summary of the rail services and frequencies available.

Service	Destinations Served	Weekday Daytime Frequency	Saturday Daytime Frequency	Sunday Daytime Frequency
Heathrow Connect	London Paddington – Ealing Broadway – West Ealing – Hanwell – Southall – Hayes & Harlington – Heathrow Terminals 1, 2 & 3	Every 30 minutes	Every 30 minutes	Hourly service
London Paddington – Reading	London Paddington – Ealing Broadway – Southall – Hayes & Harlington – West Drayton – Slough – Burnham – Taplow – Maidenhead – Twyford – Reading	Every 30 minutes	Every 30 minutes	Hourly service
London Paddington - Oxford	London Paddington – Ealing Broadway – Southall – Hayes & Harlington – West Drayton – Iver – Langley – Slough – Maidenhead – Twyford – Reading – Tilehurst – Pangbourne – Goring & Streatley – Cholsey – Didcot Parkway – Appleford – Culham – Radley – Oxford	Every 30 minutes	Every 30 minutes	Hourly service
Hayes & Harlington – London Paddington*	Southall – Ealing Broadway – London Paddington	Every 15 minutes	Every 15 minutes	Every 30 minutes

***Not including Heathrow Connect services**

Table 3.2: Rail Services from Hayes & Harlington Railway Station

3.28 Hayes & Harlington will also form one of the Crossrail stations to the west of London, when it is completed in approximately 2018. The Crossrail line will provide an additional 4 rail services per hour from the east to Central London. It will also provide access to local stations of West Drayton, Southall, Hanwell and Langley.

Transport Connectivity

3.29 Transport for London (TfL) assesses the connectivity of areas based on the WebCAT Toolkit, which includes an assessment of the PTAL, travel time mapping and catchment analysis to provide an overview of the transport network for a location.

Public Transport Accessibility Level (PTAL)

3.30 Public Transport Accessibility Levels (PTALs) are a theoretical measure of the accessibility of a given point to the public transport network, taking into account walk access time and service availability. This method is a way of measuring the density of the public transport network at a particular point.

3.31 Walk times are calculated from the specified point of interest to all public transport access points including bus stops and stations within pre-defined catchments. The PTAL incorporates a measure of service frequency to calculate an average wait time based on the frequency of service at each public transport access point. A reliability factor is added and the total access time is calculated. A measure known as an Equivalent Doorstep Frequency (EDF) is then derived for each point. These are summed for all routes within the catchment and the PTALs for the different modes are then added together to give a single value. The PTAL is categorised in nine levels, 1a to 6b where 6b represents a high level of accessibility and 1a, a low level of accessibility.

3.32 The PTAL rating of the site is 4, which represents a good level of accessibility by public transport modes. The PTAL output for the 2011 base year is included at **Appendix B**. The addition of Crossrail services to Hayes & Harlington station along with an uplift in bus service frequencies serves to increase the PTAL value of the site in the 2021 forecast year to a PTAL level of 5. The PTAL output for the 2021 forecast year is included at **Appendix C**.

3.33 It should be noted that TfL acknowledges the limitations of the PTAL assessment in the 'Assessing Transport Connectivity in London' guidance document, noting that it cannot differentiate within each category and this can result in significant variations and also it is an overall measure and cannot be used for individual public transport modes.

3.34 Whilst PTAL provides a theoretical measure for public transport accessibility taking account of access to all public transport modes, it should be noted that this type of development does not necessarily attract people to travel by all public transport modes available. Surveys from other Lidl stores around London indicate that access by bus is the key public transport mode used. In this instance, the proximity of the site to bus stops on Church Road and Botwell Lane and the range and frequency of service availability makes the site highly accessible by this mode.

Travel Time Mapping (TIM)

3.35 Travel time mapping offers an opportunity to review the connectivity of a site by specific travel mode or across all public transport modes and is available via the WebCAT TIM online calculator.

3.36 A Lidl foodstore generates a relatively high proportion of bus trips to the and from the store, which is one of the main reasons why considering an overall PTAL in isolation is not appropriate for this type of development. However, TIM plans have been produced for travel from the store during both the weekday evening peak and the daytime inter-peak periods, with the outputs included at **Appendix D**.

3.37 The outputs identify that there are significant residential areas within a 30 minute bus travel time from the site. Access is provided to Harlington to the south, Hayes and eastwards towards Southall. To the north the travel distance extends north to the A40 Western Avenue towards Northolt.

Baseline Transport Data

3.38 Manual classified turning counts were undertaken at the roundabout junction of Botwell Lane and Church Road and also Nield Road and Botwell Lane on Friday 20th March 2015 (16:00 - 19:00 hours) and Saturday 21st March 2015 (11:00 – 15:00 hours). These time periods were chosen as these are periods when traffic on the highway network is at its busiest and traffic associated with the proposed development is predicted to be highest. The survey data is included for reference at **Appendix E**.

3.39 The peak hours on the local highway network study area have been identified from the traffic survey as 16:30 – 17:30 for the weekday evening peak hour and 12:45 – 13:45 for the Saturday daytime peak hour. The associated peak hour turning movements for the weekday evening and Saturday peak hours surveyed are shown in **Figures 3.3** and **3.4** respectively.

Committed Development

3.40 There are a number of committed developments within the Hayes area that have been taken into consideration in assessing the background traffic flows on the local highway network study area. The sites considered are as follows:

- 4607/APP/2012/826 – 50 Bedroom Hotel, Bar and Restaurant, Botwell Lane;
- 59872/APP/2012/1838 – Old Vinyl Factory Mixed-use Development, Blythe Road;
- 32157/APP/2011/872 – Asda and Industrial/Warehouse Units, Station Road, Hayes; and
- Hayes Town Centre Improvements.

The Golden Cross Public House Redevelopment (4607/APP/2008/1615)

3.41 The redevelopment of The Golden Cross Public House on Botwell Lane into a 50 bedroom hotel with ancillary bar and restaurant facilities was initially approved in 2009 (reference 4607/APP/2008/1615) and has since been the subject of an extension of time application (reference 4607/APP/2012/826).

3.42 A Transport Assessment was prepared by The Cunningham Consultancy Limited in support of the initial planning application for the site. The Transport Assessment states that on average the maximum number of two-way vehicle movements across an hour is 5. It also identifies the peak hour vehicle movements, which coincide with typical highway network peak or inter-peak periods of 07:00-08:00, 17:00-18:00 and 18:00-19:00 hours whereby 10 two-way vehicles arrive/depart the site. The Transport Assessment states "*These flows will be insignificant to the number of trips and even daily fluctuation in trips in the surrounding area*."

3.43 On this basis, the traffic movements associated with the hotel use would be assumed to be incorporated into the background traffic growth taken from factors derived from TEMPRO and have not therefore been accounted for independently.

Old Vinyl Factory Mixed-use Redevelopment (59872/APP/2012/1838)

3.44 The outline application for a mixed-use redevelopment of the Old Vinyl Factory site, Blythe Road was approved in April 2013. Planning permission has been granted for up to 510 residential units, 7,886 sqm of B1 land use, 4,000 sqm of A1-A5 land uses and 4,700 sqm of D1 and D2 land uses.

3.45 A Transport Assessment has been prepared by Alan Baxter & Associates in support of the proposals. The scope of the assessment only extends as far north as Printinghouse Lane and Station Road, although Station Road is a no through road except for buses. The scope of the assessment does not extend to the highway network to the north of Hayes town centre principally Botwell Lane and therefore distributions of the identified traffic flows in the vicinity are not available.

3.46 The Transport Assessment provided a weekday peak hour assessment, which is summarised in Table 3.3 below for vehicle movements along Printinghouse Lane. No Saturday assessment was undertaken.

Printinghouse Lane Traffic Flows	Northbound	Southbound
Weekday AM Peak	111	27
Weekday PM Peak	151	45

Table 3.3: Old Vinyl Factory Committed Development Flows

3.47 It is not possible to assess the implications of this level of traffic generation on the proposed study network of Botwell Lane and Central Avenue, since no assessment has been made of vehicle movements in this area. In granting planning permission the Council have accepted that this level of vehicle movements can be accommodated on the highway network during the specified peak hours.

3.48 Background growth in the form of TEMPRO growth factors specific to Hillingdon will be applied to observed traffic flows and will therefore take account of the redevelopment of the Old Vinyl Factory in generalised growth across all arms of the study network.

<u>Asda and Industrial/Warehouse Units, Station Road (32157/APP/2011/872)</u>

3.49 Gateway TSP has obtained the Transport Assessment prepared in respect of the Asda committed development (reference 32157/APP/2011/872).

3.50 The Transport Assessment prepared by Royal Haskoning stated that 73% of Asda's trade draw would be as a result of claw back trade from Tesco Extra Bullsbridge, Sainsbury's Lombardy Retail Park and Tesco Extra Glencoe Road (Yeading).

3.51 The figures provided within the Royal Haskoning Transport Assessment indicate that main impacts of the Asda development proposals will be along North Hyde Road, Millington Road, Dawley Road and a section of Station Road to access Clayton Road. There is no demonstrable impact along Botwell Lane that would need to be accounted for in this assessment. Furthermore, in clawing back trade from the Saisnbury's (Lombardy Retail Park), there could be fewer vehicle movements along Botwell Lane as trip diversions will occur from this section of highway to Dawley Road.

3.52 On this basis, no further account has been made within this assessment of this committed development.

Hayes Town Centre Improvements

3.53 The London Borough of Hillingdon and Transport for London are committed to delivering a town centre improvement scheme in Hayes, which is phased over 2 years and commenced in February 2015. The scheme will provide streetscaping works along Station Road, Coldharbour Lane and Pump Lane with alterations to the parking layouts and the installation of dedicated cycle lanes.

3.54 The Phase 3 improvements include the opening of Station Road to two-way vehicle movements through the installation of a roundabout junction.

3.55 At this stage there are no detailed plans available of the proposal or the associated vehicle flows associated with this new junction arrangement. Whilst we are aware of the proposal to alter this junction, without the background flows or proposed layout, this cannot be considered in further detail within the proposed Lidl foodstore revised planning application assessment.

3.56 A request for information was made to both the Highway Officer at the London Borough of Hillingdon and Officers at Transport for London (TfL). TfL advised that they did not have the required information. To date, no information has been provided by the London Borough of Hillingdon and therefore no further assessment of this scheme has been undertaken.

Summary

3.57 To provide a robust assessment of background traffic growth in the area, growth rates will be derived from TEMPRO, which takes account of overall development in the area.

Assessment Years

3.58 The TfL Transport Assessment web guidance suggests that future years for assessment should be agreed with TfL and based on observed trends from approved data sources nearest the site. Given that TfL are not a consultee on the development proposals, it is assumed that the growth assumption undertaken and subsequently approved in the previous Lidl foodstore scheme at the site will remain acceptable to the Highway Officer at the London Borough of Hillingdon.

3.59 On this basis, the opening year (planned for 2016) and 5 years following the registration of the planning application (i.e. 2020). This is the same assessment as was undertaken for the consented foodstore application at the site.

3.60 Traffic growth figures have been derived from the TEMPRO database version 6.2 for the area and adjusted with reference to the National Transport Model (NTM) AF09 dataset.

3.61 Within TEMPRO there are two area categories for Hillingdon (main), both area selections have been used with an average of both outputs considered to represent the predicted growth for the area with the growth factors summarised in Table 3.4 below.

Time Period	Weekday PM Growth Factor	Saturday Daytime Growth Factor
2015 – 2016	1.0174	1.0183
2015 - 2020	1.0897	1.0955

Table 3.4: TEMPRO Growth Factors

3.62 **Figures 3.5** and **3.6** includes future year network flows for 2016 whilst **Figures 3.7** and **3.8** contain network flows uplifted to 2020 for the weekday evening and Saturday peak hours respectively.

Road Safety

3.63 Accident record data for the latest available three-year period up to 31st May 2014 has been obtained from Transport for London. The accident records refer only to road traffic accidents that resulted in personal injury (PIA). The PIA study area includes sections of Church Road, Botwell Lane, Coldharbour Lane, and Central Avenue to Glebe Road to the north of the site.

3.64 During the three year period, 22 accidents were recorded in the study area. Of these accidents, 15 occurred in daylight hours with a dry road surface, with two accidents occurring during daylight hours with a wet road surface. During darkness hours, four accidents occurred on a dry road surface and one on a wet road surface. Of the 22 accidents recorded, 21 resulted in 'slight' injuries, with the remaining accident resulting in 'serious' injuries. The serious injury was recorded when a pedestrian was hit by a motorcyclist during darkness hours on a dry road surface.

3.65 A full summary of the accident descriptions and causation factors is provided at **Appendix F** whilst an accident causation summary is provided in Table 3.5 below.

Accident Description/Cause	Number of PIA's	% PIA's
Vehicles shunts/general collisions/loss of control	7	32%
Vehicle collisions with pedestrians/mobility scooters	7	32%
Collision on/involving buses	5	23%
Vehicle collisions with pedal cyclists	3	13%
TOTAL	**22**	**100%**

Table 3.5: Summary PIA Data

3.66 Generally, the types of accidents which have occurred on the study network are typical of a town centre network, where there is a high demand from vulnerable road users such as pedestrians, cyclists and a high number of bus services passing through the area.

3.67 There is no reason to think that the development proposals would cause an increase in the number or severity of road accidents in the area.

Summary

3.68 In summary, this section has provided evidence to indicate that the site has a good level of accessibility by a range of transport modes including bus services, on foot and by cycle.

4 PROPOSED DEVELOPMENT

4.1 The development proposals comprise the redevelopment of the site to provide a Lidl foodstore. A foodstore of 2,824 square metres gross external area is proposed (1,689 square metres net sales area) on the site. The architect's site layout drawings are included at **Appendix G**.

4.2 The Lidl foodstore would occupy the full former Hayes Pool and Fitness Centre site bounding Central Avenue, Botwell Lane and Church Road, with a new access provided from Church Road.

Access Arrangements

4.3 Vehicular access into the site will be provided from a new priority junction onto Church Road, which will serve only the Lidl foodstore. Additional pedestrian and cycle access will be provided from Botwell Lane to the south to accommodate the desire line from Station Road. The access arrangements are incorporated into the site layout drawings included at Appendix G.

4.4 The proposed vehicular access onto Church Road is in the form of a raised table priority junction. Tactile paving will be provided at the proposed access to allow for pedestrian crossing along Church Road over the raised table at-grade.

4.5 The raised table junction has been designed according to the 'Traffic Calming Measures for Bus Routes' guidance document, prepared by Transport for London in September 2005. This document details the requirements for raised table junctions located on bus routes.

4.6 The access arrangement has been amended from drawing 2009D25/P/22, which was designed by the London Borough of Hillingdon in July 2013. The access proposed in this drawing has been widened, from the 4.8 metre access proposed, to a 7.77 metre access width which was part of the consented scheme onto Central Avenue. The widened access is required to allow for 16.5 metre articulated vehicles to service the site. Based on these points, the proposed access arrangement is considered acceptable in this location.

4.7 The proposed vehicular access arrangement is shown in drawing 15/0302/SK02B included at **Appendix H**. This drawing details the access arrangements complete with the locations of dropped kerbs along the Church Road frontage. From this drawing it is possible to note that opposite the bus stop, located to the north of the site access, it is possible for cars to park along the raised kerb section. If this occurs, it is not possible for cars to overtake buses along this stretch of road, and therefore this will not impact on the visibility along Church Road for vehicles egressing the proposed site access.

4.8 A Stage 1 Road Safety Audit has been undertaken of the proposed site access junction onto Church Road and is included at **Appendix I**. The Audit did not identify any problems or comments in respect of the access arrangement proposed.

4.9 Pedestrian access to the site will be provided from a frontage created in the southern section of the site, which will open up a store frontage onto Botwell Lane. This will provide centralised access to the proposed Lidl foodstore from Station Road and the Hayes town centre shopping area, access to local bus stops and surrounding residential areas alongside providing linked trip potential with the surrounding leisure and community uses. The pedestrian access will provide a direct link to the surrounding footway network and access to signalised crossings over Botwell Lane.

Parking Provision

Car Parking

4.10 Car parking standards for new developments are provided in Annex 1 of the Council's UDP. Parking standards for foodstore developments adopt the standards stated within the London Plan 2004. The London Plan has since been consolidated with alterations and a revised version adopted in March 2015. The car parking standards for foodstore development remain the same across all versions of the Plan.

4.11 The London Plan states that the maximum car parking provision for foodstore developments over 2,500 square metres GIA with a PTAL of between 4-2 is a range of between one space per 25-18 square metres.

4.12 Based on a gross internal floor area of 2,717 square metres, a range of between 109 and 151 spaces could be provided in accordance with car parking standards. The London Plan standards do not state that parking in a higher PTAL location should provide a lower level of car parking, instead the range of parking applies to all developments regardless of whether a PTAL of 2 or 4 is achieved at a site. Therefore, any parking provision equal to or lower than 151 spaces would be policy compliant at the site, as the provision would be within the maximum parking range applicable for this type and scale of development.

4.13 The development proposals include 146 parking spaces in total in the car park; broken down into the following:

- 92 standard parking spaces;
- 14 Blue Badge Holder spaces;
- 7 Brown Badge Holder spaces;
- 28 dual use electric vehicle parking spaces (14 active and 14 passive spaces); and
- 5 Parent & Child spaces.

Blue/Brown Badge Provision

4.14 The Supplementary Planning Document 'Accessible Hillingdon' adopted in May 2013 requires Blue and Brown Badge parking spaces to be provided at new developments.

4.15 The SPD requires a minimum of 10% of the total parking provision to be designed for Blue Badge holders. Based on the proposed 146 parking spaces, 14 Blue Badge holder spaces would be required.

4.16 The Brown Badge scheme is available to residents aged over 65 who have restricted mobility but are not eligible for a Blue Badge. The SPD states that 5% of the total parking provision should be allocated to Brown Badge holders. Based on the proposed 146 parking spaces, 7 Brown Badge holder spaces would be required.

4.17 The development proposes 14 Blue Badge Holder parking spaces and 7 Brown Badge Holder spaces, in line with the standards above.

Electric Vehicle Charging Points

4.18 London Plan standards state that new retail development should provide 10% active electric vehicle parking provision, with 10% passive provision safeguarded for future use.

4.19 The Transport for London 'Land for Industry and Transport' Supplementary Planning Guidance document adopted in 2012 provides a guide for developers in terms of electric vehicle parking provision. It is recognised that there are three types of charging infrastructure; standard (full charge in 5 – 7 hours), fast (full charge in 2 – 3 hours) and rapid (full charge in circa 30 minutes) although the latter is still under development and is not generally expected at new developments in London.

4.20 A typical Lidl foodstore has a relatively short dwell time compared to other retail uses in the local area. The car park is provided for Lidl customers and even in the extent that a linked trip occurred with the town centre, it is unlikely to result in a dwell time of several hours, which is required to make a significant impact to the charge of electric vehicles.

4.21 Nonetheless, the proposals at Hayes will be provided in accordance with London Plan standards with 14 active dual use electric vehicle charging bays to be provided. A further 14 bays have been identified as passive bays for the future, should demand require.

Parking Management Plan

4.22 It is envisaged that the car park operational detail could be detailed in a Car Park Management Plan, which could be secured by way of Planning Condition.

Powered Two-wheeler Parking

4.23 The Parking Standards provided in Annex 1 of the Council's UDP state that powered two-wheeler parking should be provided as additional parking at a rate of 1 space per 20 car parking spaces, in car parks providing over 20 parking spaces.

4.24 Based on a 146 space car park, 7 spaces would be required to meet this standard. The development proposes 7 powered two-wheeler parking bays, and therefore meets the standard in this location.

Cycle Parking

4.25 Cycle parking standards are contained within the Further Alterations to the London Plan 2015. The FALP 2015 require development to differentiate between long and short stay cycle parking, with standards set for each parking type.

4.26 Table 4.1 below identifies the cycle parking standards applicable to an A1 food retail development, with the minimum cycle parking provision based on a 2,824 square metre gross external floor area.

Cycle Parking Type	Cycle Parking Minimum Standard	Development Quantum	Minimum Cycle Parking Provision for Site
Long Stay	1 space per 175 sqm	2,824	16
Short Stay	First 750 sqm: 1 space per 40 sqm	750	19
	Thereafter: 1 space per 300 sqm	2,074	7
TOTAL		**2,874**	**42**

Table 4.1: Cycle Parking Standards

4.27 Table 4.2 indicates that an A1 food retail store with a GEA of 2,824 square metres would need to provide a minimum of 16 long stay and 26 short stay cycle parking spaces.

4.28 The development proposals include 16 long stay cycle parking spaces and 26 short stay cycle parking spaces, both located adjacent to the store entrance and clearly differentiated on the site location plans included in Appendix G. On this basis, the development is considered to be policy compliant in terms of cycle parking provision.

Servicing Arrangements

4.29 Deliveries to the foodstore will be from the regional distribution centre in Enfield and will be routed along Botwell Lane and north along Church Road to access the proposed foodstore. Alternatively, the vehicle could be routed along Uxbridge Road, to the north of the site.

4.30 Lidl's policy is to limit deliveries to one to two vehicles per store each day, with waste material generated by the store taken away by the same vehicle.

4.31 As per the consented scheme, servicing will take place within the customer car park, with the servicing vehicle manoeuvring into a dedicated servicing area. This is a similar manoeuvre to that undertaken at the majority of Lidl stores, with the distance the vehicle is required to reverse within the car park reduced under the proposed plans when compared with the consented scheme.

4.32 In addition to the consented scheme at the site, a precedent for servicing within the car park is present within Hillingdon. At a Lidl store located on Cowley Road, Uxbridge, a comment relating to servicing within the car park was included as a reason for refusal, though this was subsequently withdrawn by the Council during the course of the appeal.

4.33 The consented foodstore application (reference 1942/APP/2013/3565) included a Condition to restrict servicing to specific times of the day. Whilst servicing usually takes place during the daytime (outside of network and trading peak periods), this application seeks to allow for servicing to take place unrestricted at any time of the day, with a commitment made by Lidl to adhere to the principles identified within the Department for Transport 'Quiet Deliveries Good Practice Guidance – Key Principles and Processes for Retailers' published in 2014 alongside their own standard practice guidance.

4.34 The servicing of the site would be subject of a Servicing Management Plan, which would be secured by way of a Condition, and is included at **Appendix J.** This contains swept path plots demonstrating that the proposed servicing arrangements will operate satisfactorily and would include commitments such as:

i) General Servicing Best Practice:

a) Making sure all equipment (vehicles and servicing area) is in good working order and maintained to minimise noise;

b) Identify timings for deliveries in advance so both the driver and the store operatives are prepared for the arrival; and

c) Ensure all staff are briefed and trained to follow the company code of practice.

ii) Operation of the Servicing Area:

d) Out of hours, switch off any bells/alarms/speakers when the servicing area doors are open;

e) Avoid where possible caging banging together or against servicing equipment;

f) Switch off reversing alarm for out of hours deliveries; and

g) Turn off service vehicle engines when not manoeuvring to prevent idling.

5 NET IMPACT OF DEVELOPMENT PROPOSALS

5.1 This section describes the assessment of the net impact of the proposed foodstore on the highway network during the identified weekday evening peak hour of 16:30 – 17:30 and Saturday peak hour of 12:45 – 13:45.

5.2 The following paragraphs consider the trip generation and distribution of the proposed Lidl foodstore and the forecast impact that this will have on the local highway network in 2016, for the opening year, and 2020 for 5 years post planning application submission.

Existing/Consented Site Use

5.3 The site was formerly the Hayes Pool and Fitness Centre, which has subsequently been demolished following the opening of the Botwell Green Sports and Leisure Centre to the east of Central Avenue. The site is currently vacant.

5.4 A portion of the site currently has planning consent for a 1,407 square metre Lidl foodstore (planning reference 1942/APP/2013/3565), with access taken from Central Avenue. The consented scheme was approved with a 64 space car park on the site.

5.5 The Transport Assessment prepared by Gateway TSP to accompany the consented application set out the assessment of the Lidl foodstore based on sales floor area. This approach was accepted by the Highway Officer at the London Borough of Hillingdon, with the application receiving a positive recommendation on highways.

5.6 As a result, a similar assessment will be undertaken for the proposed scheme, with an assessment undertaken using the same Lidl London store data, although the trip rates will be subject to a sensitivity uplift to take into account the larger store size proposed. Additionally, the assessment years used in the assessment process will be updated.

5.7 In terms of vehicular impact, the consented scheme was forecast to generate 66 arrivals and 74 departures during the weekday evening peak hour, with a Saturday peak period expected to generate 87 arrivals and 97 departures.

5.8 The traffic distributions for the consented scheme were based on observed junction survey proportions, with 87% of vehicular traffic accessing and leaving the site via Botwell Lane.

Proposed Lidl Foodstore

5.9 The assessment of the proposed Lidl foodstore is based on multi-modal surveys undertaken at a number of Lidl store located across London.

5.10 Lidl foodstores vary in size, PTAL and parking provision from one site to the next, therefore taking a number of stores surveyed recently and identifying an average trip rate is considered the most suitable approach. Surveys have been undertaken at Lidl stores in Barking, Brixton, Clapham and Cricklewood between 2010 and 2013. Multi-modal surveys are available for the Barking, Brixton and Clapham Lidl stores, with the results summarised below.

Mode of Travel	Lidl Store Modal-split Survey Results (Friday)			
	Barking	Brixton	Clapham	Average
Walk	34%	39%	32%	35%
Bus	13%	21%	18%	17%
Cycle	3%	4%	2%	3%
Car Driver (to the site)	43%	30%	43%	39%
Car Driver Off-site (e.g. linked trip)	4%	5%	3%	4%
Train	1%	0%	2%	1%
Tube	1%	0%	0%	0%
Other	1%	1%	1%	1%
TOTAL	**100%**	**100%**	**100%**	**100%**

Table 5.1: Friday Multi-modal Trip Proportions to Lidl Foodstores

Mode of Travel	Lidl Store Modal-split Survey Results (Saturday)			
	Barking	Brixton	Clapham	Average
Walk	38%	33%	27%	32%
Bus	13%	20%	14%	16%
Cycle	1%	3%	2%	2%
Car Driver (to the site)	44%	33%	51%	43%
Car Driver Off-site (e.g. linked trip)	3%	7%	3%	4%
Train	2%	1%	2%	2%
Tube	0%	1%	0%	0%
Other	0%	2%	1%	1%
TOTAL	**100%**	**100%**	**100%**	**100%**

Table 5.2: Saturday Multi-modal Trip Proportions to Lidl Foodstores

5.11 The PTAL of a Lidl foodstore should not be the sole factor in considering its accessibility, since only a small minority of customers are likely to travel by tube or train to access the store. This is demonstrated in both Tables 5.1 and 5.2, since Barking has a PTAL of 6a, Brixton a PTAL of 6a and Clapham a PTAL of 6b, however regardless of proximity to train or tube the major modes of travel to the foodstore are by car, bus or on foot.

5.12 Within the DfT Guidance on Transport Assessment, 'Comparable Accessibility' is defined as "*sites with similar levels of public transport, cycling and pedestrian accessibility".* It is on this basis that all of the sampled sites are accessible by bus, on foot and by cycle and are therefore considered to represent suitable sites upon which to base this information.

5.13 It should be noted that the Lidl foodstore in Brixton is generally excluded from the overall trip generation calculation due to having a smaller sales floor area and a 29 space car park, which represents parking restraint for a typical Lidl foodstore. However, the modal split survey results indicate that when restraint is in place, people who still choose to visit the store (instead of travelling further to a store with more parking) travel by alternative modes. The public transport patronage for bus and tube is higher at the Brixton store than the Clapham and Barking stores, despite these having an equal or higher accessibility to public transport modes.

5.14 Train and tube journeys account for up to 3% of journeys made to a Lidl foodstore. The method for calculating PTAL takes account of all public transport modes with a single PTAL value provided as a summary of all the different modes available. This means that in the calculation process a site could be well located for access to bus stops and regular bus services, but if it is located some distance from rail, tube or tram services it receives a lower PTAL calculation.

5.15 PTAL calculations provide an overview of general public transport accessibility, but specific development proposals such as a discount foodstore should be considered in context. In this instance, clearly access to bus services is paramount above other public transport modes regardless of proximity to rail stations.

Vehicular Trip Assessment

5.16 It is important to note that Lidl is identified as the end occupier for the development and the proposed site/store layout is designed to Lidl's specification. It is widely accepted good practice to tailor a Transport Assessment if an end user is identified, since this is likely to provide a more detailed and representative assessment of the potential impacts of such a development, rather than a generic use class assessment.

5.17 On this basis, surveys of existing Lidl stores within the London area (undertaken in the last 5 years) located at Barking, Clapham and Cricklewood are used to determine the typical vehicular trip profile across both peak periods. For reference, each of the store surveys and the average trips rates identified are provided in **Appendix K**.

5.18 The vehicular trip rates for the Lidl foodstores have been calculated as an average of the trip rates identified at the three surveyed store locations (as Brixton has been excluded from the vehicular trip assessment).

5.19 Due to the increase in store size compared to the consented scheme, and compared to the Lidl surveyed stores, it is proposed to apply a sensitivity test uplift of 10% to the identified Lidl London store trip rates. This 10% uplift figure is considered to represent a robust assessment, as it ensures that the trip rates used are reflective of a Lidl store whilst taking into account the extra customers that could drive to the site as a result of the increase in parking spaces.

5.20 The identified average trip rates have been applied to the proposed 1,689 square metre sales floor area and is summarised in Table 5.3 for the identified peak hours of 16:30 – 17:30 for the weekday evening peak and 12:45 – 13:45 for the Saturday peak. Due to both peak periods spanning two hourly periods (e.g. the Friday peak is within the 16:00 – 17:00 and 17:00 – 18:00 hourly periods), the hour period with the higher trip rates will be used for assessment purposes.

	Friday Evening Peak Hour		Saturday Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicle Trip Rates	5.480	5.566	8.047	7.470
Vehicle Movements	93	94	136	126

Table 5.3: Lidl Foodstore Vehicle Trip Rates (per 100 sqm) and Movements

5.21 The vehicle trips calculated in Table 5.3 provides a net increase of 27 arrivals and 20 departures in the weekday evening peak hour and 49 arrivals and 29 departures during the Saturday peak hour when compared to the consented scheme peak hour traffic flows, mentioned in paragraph 5.7 of this report.

5.22 Using an average of the modal split survey travel modes identified in Tables 5.1 and 5.2 and the vehicle trips identified in Table 5.3, a breakdown of the peak hour trips to the store by mode is provided in Table 5.4. The proposed Lidl store trip rates, including sensitivity uplift, and vehicle movements are included at **Appendix L**.

Mode of Travel	Friday Evening Peak Hour			Saturday Peak Hour		
	Modal Split	Arr	Dep	Modal Split	Arr	Dep
Walk	35%	83	85	32%	101	94
Bus	17%	41	41	16%	51	47
Cycle	3%	7	7	2%	6	6
Car Driver (to the site)	39%	93	94	43%	136	126
Car Driver Off-site (e.g. linked trip)	4%	10	10	4%	13	11
Train	1%	2	2	2%	6	6
Tube	0%	0	0	0%	0	0
Other	1%	2	2	1%	3	3
TOTAL	**100%**	**238**	**241**	**100%**	**316**	**293**

Table 5.4: Peak Hour Proposed Lidl Hayes Multi-modal Trips

5.23 Table 5.4 provides an indication of the Lidl foodstore multi-modal trip attraction potential across both of the identified peak hour survey periods.

Comparison with TRICS A1 Foodstore Category

5.24 Whilst the Lidl trip generation assessment identified above represents an evidence-based assessment from operational Lidl stores in the London area, because the planning application is made in respect of an open A1 retail it is often said that assessment should consider the implications of a mainstream foodstore operators on the site.

5.25 The discount foodstore occupies a niche within the grocery market, with the Competition Commission ('The Supply of Groceries in the UK Market Investigation', 2008) recognising this form of 'Limited Assortment Discounter' as a separate classification to other grocery retailers. It noted that discount foodstores offer significantly fewer products compared to large grocery retailers of a similar size. This in part indicates the differences between the different foodstore types and shows that generic foodstore trips cannot be used to justify a proposal such as a Lidl.

5.26 Notwithstanding the above, in order to address A1 use of the site a TRICS assessment has been undertaken of the '01 A – Food Superstore' category. Sites within the TRICS database have retail floor areas ranging between 640 – 8,000 square metres. The proposals at Hayes would provide 1,689 square metres of retail floor space, but to provide a robust assessment an upper limit of 2,000 square metres retail floor space has been applied.

5.27 Table 5.5 provides a summary of the foodstore survey sites available within the TRICS database under this category (with reference to multi-modal surveys) for both the weekday and weekend periods for all sites located in England (including Greater London).

TRICS Reference and Foodstore Location	Parking Provision	Retail Floor Area	Survey Day
CA-01-A-01 Sainsbury's Cambridge	0	1550	Weekday
CB-01-A-07 Somerfield Carlisle	88	1500	Weekday
CN-01-A-03 Sainsbury's Bloomsbury	0	1454	Weekday
CN-01-A-04 Sainsbury's Holborn	0	1000	Weekday
KI-01-A-01 Sainsbury's Kingston	0	1400	Weekday
SF-01-A-02 Sainsbury's Ipswich	0	1640	Weekday
DH-01-A-02 Sainsbury's Durham	40	640	Weekend
NY-01-A-02 Sainsbury's North Allerton	226	1850	Weekend

Table 5.5: TRICS Foodstore Survey Sites

5.28 Clearly the list of available foodstore sites from this category in TRICS indicates that mainstream food retailers do not operate within the Lidl discount foodstore model. The smaller retail floor areas represent the convenience sector in town centre locations and no associated parking. Sites that do provide parking are more closely matched in terms of retail floor space and provide significantly higher parking levels than that proposed. It should also be noted that all of the London based sites are car-free developments.

5.29 If the trip rates were identified for the above sites based on the selection criteria, the trip rates used for the assessment would not reflect either the level of parking proposed or represent the proposed size of the development and could not therefore be relied upon to provide a robust assessment for potential impacts on the surrounding highway network. On this basis, assessing generic A1 foodstore on sites brought forward for planning application purposes by Lidl is not considered appropriate.

Comparison with TRICS Discount Foodstore Category

5.30 The TRICS database does allow for the differentiation of foodstores, with discount foodstores assessed within the category '01 C – Discount Food Stores'. To complete this assessment, a comparison between the London Lidl surveyed sites and appropriate TRICS sites has been presented for each of the peak periods for assessment.

5.31 This category within TRICS offers a more comparative range of sites in terms of retail floor areas of stores surveyed with a range between 750 – 1,256 square metres. It should be noted that within the category '01 C – Discount Food Stores' there is one surveyed site located within London (Wood Green) and one within the South East (Maidstone). In total, there are only 9 surveys available of which three were undertaken on a Saturday (one survey in 2005, one in 2006 and the other 2014) and the remaining six were undertaken on a Monday – Wednesday period (not reflecting that Friday is typically a busier period for foodstore demand) with surveys conducted between 2007 - 2012. The 2014 survey surveyed an Iceland store in Wood Green. It could be argued that Iceland is not a discount foodstore, instead it could be classed as a specialist foodstore, given its reliance on frozen foods. However for a robust assessment of the TRICS discount foodstore category, this site is included within the following assessment.

5.32 On this basis, to present a representative sample of discount foodstores an assessment of sites located within England has been undertaken. The weekday assessment is summarised in Table 5.6 and the Saturday assessment in Table 5.7.

Time Period	TRICS – All England			Lidl Specific Assessment		
	Arr	Dep	Total	Arr	Dep	Total
10:00 – 11:00	76	69	145	83	76	159
11:00 – 12:00	71	68	139	95	82	**177**
12:00 – 13:00	73	75	148	113	111	**224**
13:00 – 14:00	76	74	150	98	92	**190**
14:00 – 15:00	85	79	164	101	103	**204**
15:00 – 16:00	82	86	**168**	94	105	**199**
16:00 – 17:00	70	77	147	93	94	**187**
17:00 – 18:00	63	72	135	89	96	**185**
18:00 – 19:00	48	55	103	75	85	160
TOTAL	**644**	**655**	**1,299**	**841**	**844**	**1,685**

Table 5.6: Discount Foodstore Weekday Vehicular Trip Comparison for Hayes Proposal

5.33 It could be argued that the TRICS assessment presented in Table 5.6 underestimates the level of vehicular trips associated with a typical Lidl foodstore located within the London area. The numbers in bold have been used to add emphasis to the difference in peak arrival/departure profiles and also to demonstrate that in the assessment period, the TRICS output peak hour of 168 vehicle movements is matched or exceeded over 7 of the 9 hours of survey data presented. The Transport Assessment is based on the Lidl specific assessment and, based on the above comparison, it presents a robust weekday assessment of the type of use proposed.

Time Period	TRICS – All England			Lidl Specific Assessment		
	Arr	Dep	Total	Arr	Dep	Total
10:00 – 11:00	44	11	55	116	99	**215**
11:00 – 12:00	81	51	132	129	118	**247**
12:00 – 13:00	75	67	142	136	126	**262**
13:00 – 14:00	87	98	185	121	136	**257**
14:00 – 15:00	95	94	**189**	123	115	**238**
15:00 – 16:00	95	91	186	115	119	**234**
16:00 – 17:00	79	80	159	114	110	**224**
17:00 – 18:00	67	74	141	96	119	**215**
18:00 – 19:00	68	86	154	94	99	**193**
TOTAL	**691**	**652**	**1,343**	**1,044**	**1,041**	**2,085**

Table 5.7: Discount Foodstore Weekend Vehicular Trip Comparison for Hayes Proposal

5.34 In Table 5.7, the figures in bold have been used to emphasise the peak hour in the TRICS assessment and again to highlight that based on typical Lidl stores operating in London, the arrival/departure peak is exceeded in all 9 survey hours presented. This clearly indicates that whilst the TRICS data presents a generic assessment of discount foodstores operating within England, the output trip rates are lower than the equivalent trip rates drawn from the available Lidl operational data. On this basis the travel data available for the specific end occupier provides the most robust assessment available of an A1 retail use of the type and size proposed.

Trip Types

5.35 Whilst the Lidl trip rates provide a guide for the potential level of demand for a new foodstore, consideration must be given to the types of retail trip that could be made to the store. The trip types will be classified into the following categories:

i) Primary New trips – a single purpose trip that is new to the highway network during the assessment period. If there is flexibility over when and where a

shopping trip is undertaken, it is unlikely a person would choose to make such a trip during peak highway network periods.

ii) Primary Transferred Trips – a single purpose trip that previously used an alternative retail foodstore and has transferred to the new foodstore.

iii) Linked Pass-by Trips – a multi-purpose trip that passes the new foodstore without making a network diversion.

iv) Linked Diverted Trips – a multi-purpose trip that has made a network diversion to visit the new foodstore.

Linked Pass-by and Diverted Trip Methodology

5.36 Pass-by and diverted traffic distribution is now required to be assessed through the TRICS Research Report 14/1 'Pass-By and Diverted Trips Report'. This report supersedes the TRICS 95/2 Research Report, and requires the user to assess trip type proportions on a site specific basis.

5.37 Whilst the report assesses pass-by and diverted trips, it does not take into account transferred trips. A step by step guide as to how pass-by/diverted trips should be deduced is included in the above report. Each parameter for the determination of a suitable pass-by/diverted trip proportion is set out within the following paragraphs.

Location Type

5.38 As the development site is situated within the boundary of Hayes town centre, the site would be classified as being located in a 'town centre' location. The report notes that as a store's proximity to a town centre increases, the potential percentage of pass-by trips also increases. On this basis, the development site would experience higher levels of pass-by trips.

5.39 However, with the site located away from one of the main routes through Hayes town centre (Botwell Lane), it is considered that the development site is likely to produce a large number of diverted trips, as customer divert from Botwell Lane onto Church Road to access the foodstore.

Facilities

5.40 The level of pass-by and diverted trips is also influenced by the range of facilities within the retail unit. This includes:

- Café or Restaurant;
- Clothing;
- Electricals;
- Garden Centre;
- Homeware;
- Opticians;
- Petrol Station;
- Pharmacy;
- Post Office;
- Recycling;
- Stationary; or
- Travel Agents.

5.41 The Lidl model involves Lidl selling a restricted number of non-food items, with special offers changing on a twice weekly basis. Therefore, there is unlikely to be a large selection of items fitting the categories above, and as a result, the level of pass-by and diverted trips to the store would be reduced.

Gross Floor Area

5.42 Two store categories have been devised within the TRICS report based on GFA; stores with a GFA of 4,000m² or less and those with a GFA higher than 4,000m². Stores with a GFA of less than 4,000m² are classified as convenience stores as opposed to a comparison store. All Lidl foodstores have a floor area of less than 4,000m², with the Hayes proposal having a GFA of 2,824 square metres. Therefore, this store is classified in the convenience category.

5.43 Convenience stores are described as more likely to produce pass-by trips than diverted trips, whilst are people prepared to travel further to access a comparison store than a convenience store (20 minutes for a comparison store, compared to 10 minutes for convenience).

5.44 As such, the proposed store would attract more pass-by than diverted trips as people are more likely to travel to the store from within the immediate surrounding area.

Proximity to Infrastructure

5.45 The proximity of the development site to major infrastructure will impact on the level of pass-by/diverted trips, which includes railway stations and public transport interchanges; schools; large residential areas; other commercial areas; competition sites; and major office / workplace areas.

5.46 The site is located on the edge of Hayes town centre and therefore is located in the vicinity of the major retail and employment areas in the locality. By being located on the town centre boundary, the site is also located adjacent to the surrounding residential areas, especially to the north and west of Hayes town centre. The site also benefits from a high quality public transport network, with bus interchanges located along Botwell Lane and Hayes and Harlington railway station located approximately 750 metres south of the site.

5.47 On this basis, the site could experience a number of pass-by and diverted trips by people commuting to/from work or linking their trip with a visit to Hayes town centre.

Click and Collect

5.48 The TRICS report notes that having click and collect facilities within a development is likely to increase the proportion of pass-by trips. The current Lidl retail model does not include click and collect facilities, and therefore this will have no impact of the development trip distribution.

Pass-by and Diverted Trip Proportion

5.49 Based on the above assessment, it is considered that the development location could generate a number of pass-by and diverted trips. This is due to the site location, away from the main routes through Hayes town centre, alongside its classification as a 'convenience store'. The percentage of pass-by/diverted trips as a percentage of overall trips will however be affected by the typical operation of a Lidl store with limited additional facilities.

5.50 The following assumptions will be used within this Transport Assessment:

i) Friday evening pass-by trips – 20%;

ii) Friday evening diverted trips – 20%;

iii) Saturday pass-by trips – 15%; and

iv) Saturday diverted trips – 15%.

5.51 This is consistent with the advice provided within the now superseded 95/2 TRICS Research Report, which concluded that pass-by and diverted trips generally comprise 30 – 40% of trips associated with a foodstore during the peak periods.

5.52 Pass-by development trips have been distributed based on the observed turning count surveys from the Botwell Lane/Church Road roundabout. These turning counts allow for the traffic flows passing the site along Church Lane to be calculated.

5.53 Based on the layout of the surrounding network, diverted trips have been assumed to have diverted from the Botwell Lane/Church Road roundabout junction to the south of the site or from Uxbridge Road and residential areas to the north of the site, with a 60/40 split between the two.

5.54 The remaining percentage of trips will constitute either primary new or transferred trips, each of which will be considered below.

Primary New/Transferred Trips

5.55 The vast majority of vehicular trips to a new retail facility are not 'new' to the highway network. Therefore, a new food retail facility will result primarily to a change in journey rather than new journeys. It is commonly accepted that there are few, if any, new trips on the local highway network.

5.56 To ensure a robust assessment is undertaken of the proposed foodstore, an allowance has been made for potential new trips. For purposes of analysis, 10% of foodstore trips in both peak periods have been assumed to be new to the highway network. This is higher than commonly accepted and is considered to represent a worst case scenario. Primary new trips have been distributed on the highway network based on the observed turning proportions from the baseline traffic survey.

5.57 The remainder of the trips will constitute primary transfer trips from other retail foodstore locations. Research undertaken by Napier University (MacIver & Dickinson, 1992) before and after the opening of four new food supermarkets concluded that the split between primary trips and linked trips is approximately 60:40 during the Friday evening peak period and 70:30 during a Saturday peak. This coincides with the pass-by and diverted trip proportions which were assumed to make up 40% of trips on the Friday peak period and 30% of trips on the Saturday peak period.

5.58 It is therefore considered reasonable to use these trip type proportions as a basis for the assessment of the Lidl foodstore proposals. For the purposes of this assessment, it is assumed that there will be 60% primary trips during the Friday evening peak and 70% during the Saturday peak.

Summary of Vehicle Trip Types

5.59 Suitable trip types have been identified for the foodstore in terms of primary new, primary transferred, linked pass-by and linked diverted trips. Table 5.8 provides the trip type proportions that will be used in this Transport Assessment.

Trip Type	Friday Evening Peak Hour	Saturday Peak Hour
Primary New Trips	10%	10%
Primary Transferred Trips	50%	60%
Linked Pass-by Trips	20%	15%
Linked Diverted Trips	20%	15%

Table 5.8: Trip Type Proportions

5.60 The trip type proportions have been applied to the identified peak hour vehicle movements (set out in Table 5.3), with the resultant level of trips for each type summarised in Table 5.9 below.

Trip Type	Friday Evening Peak Hour		Saturday Peak Hour	
Primary New Trips	9	9	14	13
Primary Transferred Trips	47	47	82	76
Linked Pass-by Trips	19	19	20	19
Linked Diverted Trips	19	19	20	19
TOTAL	**93**	**94**	**136**	**126**

Table 5.9: Associated Vehicle Movements Based on Trip Type

5.61 The total development traffic is included in **Figures 5.1** and **5.2** for the Friday evening and Saturday peak hours respectively, taking into account the above trip types. **Figures 5.3** and **5.4** demonstrate the 2016 future year baseline with proposed development traffic flows for the Friday evening peak and Saturday peak hours, with **Figures 5.5** and **5.6** providing the same for the 2020 future year baseline with proposed development.

6 JUNCTION CAPACITY ASSESSMENT

6.1 The highway network has been modelled for the existing situation (2015 observed), the anticipated opening year (2016) and five years following the submission of the planning application (2020), including background growth, without and with the proposed Lidl development. Each scenario has been modelled for the two established assessment periods of 16:30 – 17:30 for the weekday evening peak and 12:45 – 13:45 for the Saturday peak.

Site Access/Church Road Junction

6.2 The capacity of the proposed site access junction onto Church Road has been modelled using the Junctions 8 PICADY programme. The full Junctions 8 PICADY report is included at **Appendix M**.

6.3 The outputs from Junctions 8 set out the relationship between traffic flow and the capacity of the junction as a ratio, the ratio of flow to capacity (RFC). RFCs are provided for each movement and values between 0 and 1 indicate that the highway is operating within capacity. For new junctions, it is widely accepted that the maximum RFC at the junction should not exceed 0.85. It is generally accepted that free-flowing conditions can be achieved where the RFC is less than or around 0.85.

6.4 The site access junction has been modelled for the 2016 with development and 2020 with development scenarios, due to the fact that the junction is proposed by the development. On this basis, the summary of the 2016 scenarios are included in Table 6.1 below, with Table 6.2 providing a summary of the 2020 modelling scenarios.

Link	2016 Friday Evening Peak Hour		2016 Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Site Access	0.179	0.22	0.269	0.36
Church Road (s)	0.088	0.17	0.139	0.27

Table 6.1: Site Access/Church Road Junctions 8 PICADY 2016 with Development Summary

Link	2020 Friday Evening Peak Hour		2020 Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Site Access	0.182	0.22	0.274	0.37
Church Road (s)	0.090	0.18	0.143	0.29

Table 6.2: Site Access/Church Road Junctions 8 PICADY 2020 with Development Summary

6.5 Tables 6.1 and 6.2 indicate that the site access junction operates well within capacity and within the 0.850 RFC threshold for new junctions in all scenarios assessed.

Botwell Lane/Church Road Roundabout Junction

6.6 To assess the junction capacity of the existing Botwell Lane/Church Road mini-roundabout junction, and assess the potential impacts of the proposed development, the Junctions 8 ARCADY modelling software has been used.

2015 Baseline Capacity Assessment

6.7 This junction has been modelled for the observed 2015 baseline, to allow for the model to be calibrated against the observed queue surveys. The junction has been modelled as a standard roundabout since the roundabout is kerbed, preventing vehicles from travelling over it as a conventional mini-roundabout is designed to allow.

6.8 Table 6.3 below provides a summary of the 2015 junction operation, with the ARCADY output results for all scenarios included at **Appendix N**.

Link	2015 Observed Friday Evening Peak Hour		2015 Observed Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Botwell Lane (nw)	0.552	1.24	0.446	0.82
Church Road	0.267	0.40	0.335	0.53
Botwell Lane (to town centre)	0.589	1.47	0.676	2.11

Table 6.3: Botwell Lane/Church Lane Junctions 8 ARCADY 2015 Observed Summary

6.9 Table 6.3 indicates that with the junction modified to reflect the observed traffic snapshot, the junction presently operates within capacity. A maximum queue of 2 PCU was recorded on the Botwell Lane arm from the town centre during the Saturday peak hour. These results reflect the queue surveys undertaken at the junction.

2016 Capacity Assessment

6.10 The uplifted 2016 assessment represents the potential opening year of the development. Table 6.4 provides a summary of the 2016 uplifted baseline and with development scenarios for the weekday evening peak hour. Table 6.5 provides the same scenarios, albeit for the 2016 Saturday peak hour.

Link	2016 PM Future Year Baseline		2016 PM Future Year Baseline with Development	
	RFC	Queue	RFC	Queue
Botwell Lane (nw)	0.562	1.29	0.455	0.85
Church Road	0.277	0.42	0.345	0.55
Botwell Lane (to town centre)	0.600	1.54	0.691	2.25

Table 6.4: 2016 Weekday Evening Peak Hour ARCADY Model Summary

Link	2016 Saturday Future Year Baseline		2016 Saturday Future Year Baseline with Development	
	RFC	Queue	RFC	Queue
Botwell Lane (nw)	0.580	1.39	0.481	0.94
Church Road	0.317	0.50	0.396	0.68
Botwell Lane (to town centre)	0.617	1.65	0.725	2.62

Table 6.5: 2016 Saturday Peak Hour ARCADY Model Summary

6.11 Tables 6.4 and 6.5 indicate that in all scenarios assessed, the junction is expected to operate within its theoretical capacity. In both peak hours assessed, the impact of the proposed development is minimal, with a maximum increase in RFC of 0.05 on the Church Road arm during the Saturday peak hour.

2020 Capacity Assessment

6.12 The uplifted 2020 assessment represents five years following the submission of the planning application. Table 6.6 summarises the 2020 future year baseline and with development scenarios for the weekday evening peak hour, with Table 6.7 providing the same for the Saturday peak hour.

Link	2020 PM Future Year Baseline		2020 PM Future Year Baseline with Development	
	RFC	Queue	RFC	Queue
Botwell Lane (nw)	0.603	1.53	0.493	0.99
Church Road	0.299	0.46	0.373	0.63
Botwell Lane (to town centre)	0.645	1.86	0.747	2.93

Table 6.6: 2020 Weekday Evening Peak Hour ARCADY Model Summary

Link	2020 Saturday Future Year Baseline		2020 Saturday Future Year Baseline with Development	
	RFC	Queue	RFC	Queue
Botwell Lane (nw)	0.623	1.65	0.518	1.09
Church Road	0.340	0.55	0.426	0.77
Botwell Lane (to town centre)	0.666	2.03	0.786	3.57

Table 6.7: 2020 Saturday Peak Hour ARCADY Model Summary

6.13 Tables 6.6 and 6.7 indicate that in all scenarios assessed, the junction will operate within its theoretical capacity. A maximum RFC is recorded on the Botwell Lane (to town centre) arm during the Saturday peak hour of 0.786 in the with development scenario, with maximum queuing of 4 PCU.

6.14 The highest impact of the development is forecast on the Church Road arm, with an increase in RFC of 0.053 during the Saturday peak hour, with 1 PCU queuing in both the baseline and with development scenarios.

Summary

6.15 Any impacts on this junction by the development are considered minimal, with low levels of queuing recorded on all arms. In addition, the development is seen to have a minimal impact on the operation of the roundabout junction, with a maximum increase in RFC of 0.051 on the Church Road arm. In all assessed scenarios, the junction is seen to be operating within its theoretical capacity.

Summary of Junction Operation

6.16 Analysis of the site access junction and the Botwell Lane/Church Road mini-roundabout indicates that within all scenarios assessed, both junctions are expected to operate within the theoretical capacity and with minimal queuing, albeit that the roundabout junction is forecast to operate close to its theoretical capacity. The proposed development does not result in a material impact in delay, queue or capacity constraint in the time periods and scenarios assessed.

7 MITIGATION MEASURES

7.1 The highway network impacts associated with the development of a foodstore at the proposed site have been shown not to have a material impact on the operation of the local highway network. Therefore, there is no justification for investment in capacity improvement works to the network.

7.2 Whilst capacity improvement works to the highway network are not considered justifiable, certain mitigation measures are proposed as part of the development proposals to improve safety and the surrounding environment for all highway users.

Promoting Smarter Choices via Travel Planning

7.3 Lidl UK acknowledges the importance of encouraging sustainable travel behaviour and the influence Travel Plans can have in helping to reduce reliance on the car. The Travel Plan for the site will take reasonable steps to engage both staff and customers in the concepts of Smarter Choices. At this stage, a Draft Travel Plan has been prepared and is included as a separate document in the application documentation.

7.4 The Draft Travel Plan provides details of a range of initiatives to reduce the need for travel and to encourage the use of sustainable modes. It comprises a package of site-specific measures aimed at improving the available choices and to raise awareness of these choices.

7.5 It is anticipated that, over time, the Travel Plan will help to reduce the number of car-borne trips to and from the site, and thus reduce peak period congestion on the local highway network.

Access Arrangements

7.6 The development proposes a new, dedicated site access onto Church Road. This access arrangement has the benefit of reducing traffic on Central Avenue, due to the site access moving from Central Avenue to Church Road. This results in a net benefit to the highway network due to the lower traffic flows along Central Avenue, which is a residential road subject to speed control measures to the north of the site.

7.7 In addition, servicing access will be taken from Church Road as opposed to Central Avenue, reducing the volume of HGV traffic that could pass along Central Avenue. Due to the large numbers of buses routing along Church Road, an additional servicing vehicle from the Lidl store would not result in a detriment to the local highway network.

7.8 The scheme also proposes pedestrian access along a large proportion of the Botwell Lane frontage and onto Church Road, which enhances the pedestrian links in the area. This allows for ease of access to bus stops located on Church Road and Botwell Lane, and improves pedestrian linkage into Hayes town centre.

8 SUMMARY AND CONCLUSIONS

8.1 Gateway TSP is instructed by Lidl UK GmbH to prepare this Transport Assessment (TA) to accompany a planning application to redevelop the site of the former Hayes Pool and Fitness Centre, Central Avenue, Hayes. This report considers the highways and transport matters relating to the proposed development and should be read in conjunction with the Draft Travel Plan (DTP), also prepared by Gateway TSP.

8.2 In summary, this Transport Assessment has identified the following:

- The development proposals would result in the redevelopment of a vacant Brownfield site;
- Planning consent has already been granted for a Lidl foodstore on a portion of the site, with the proposals seeking an increase in sales floor space and car parking as a result of the development proposals;
- The site benefits from good access on foot, cycle and public transport and is located with a PTAL 4 location;
- The development proposes a 1,689 square metre sales floorspace Lidl foodstore, representing an increase of 282 square metres sales floorspace when compared with the consented scheme;
- Car parking would be provided in accordance with London Borough of Hillingdon and London Plan standards, including provision for electric vehicle charging points, motorcycle parking and accessible spaces for Brown and Blue Badge holders in accordance with 'Accessible Hillingdon' SPD requirements;
- Vehicular access would be taken from a new raised table priority junction onto Church Road, providing a dedicated access for the Lidl foodstore. This access design is based on a scheme proposed by the London Borough of Hillingdon in July 2013, albeit with a slightly widened access road;

- Capacity modelling of the proposed site access junction and of the Botwell Lane/Church Road mini-roundabout junction indicate that the junctions operate within their theoretical capacity in the existing, 2016 and 2020 scenarios assessed. The results indicate that the proposed development would not have a material impact on queuing, delay or theoretical capacity on the highway network;
- The development proposals would not result in a material increase in vehicle movements on the surrounding highway network, with the majority of trips being pass-by, diverted, linked or transferred and therefore already present on the highway network; and
- A Draft Travel Plan has been prepared to promote sustainable travel modes to/from the site.

Conclusion

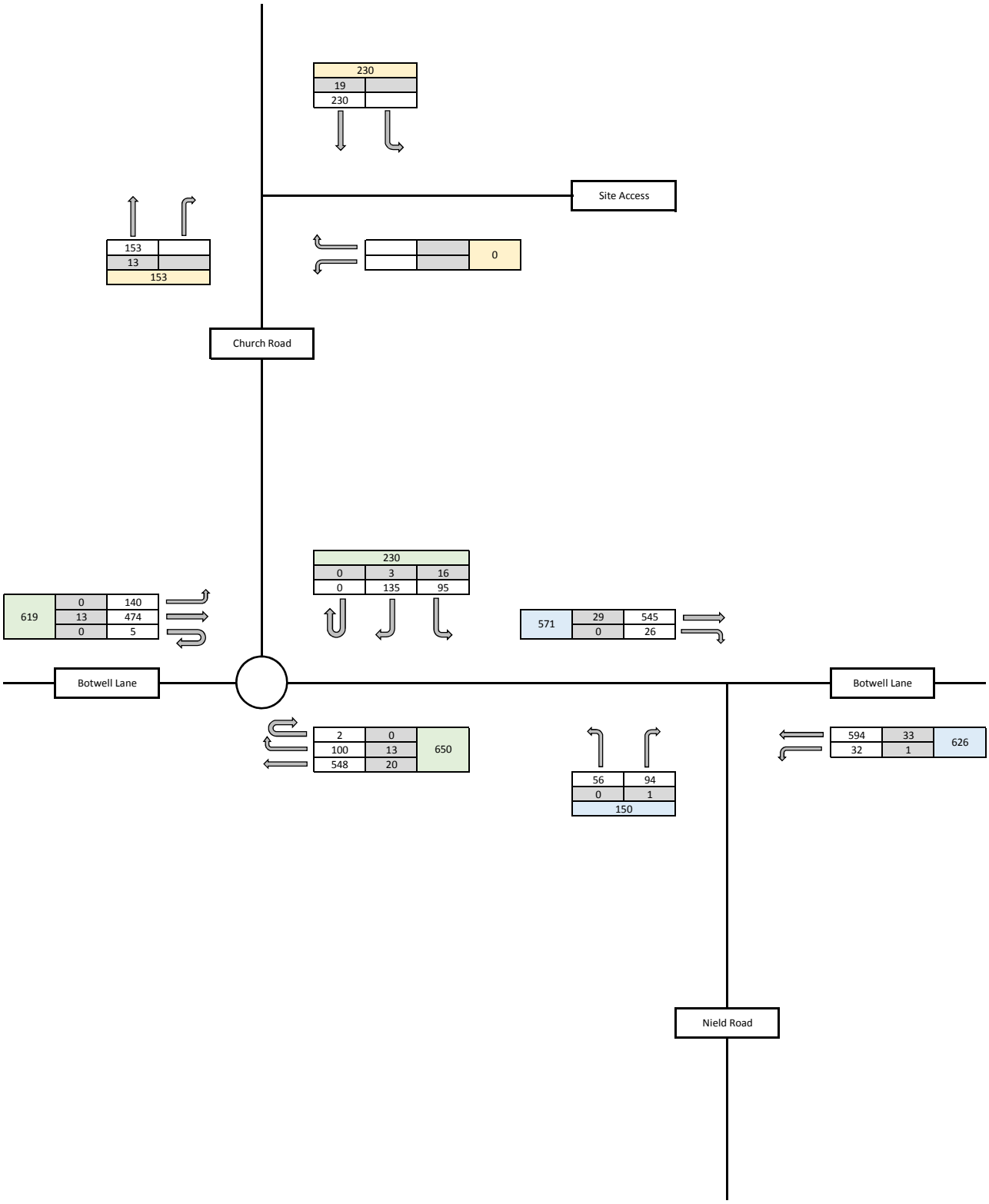
8.3 In view of the above, the proposed development is considered to be acceptable in transport terms and meets with local and national policy criteria. The assessment work undertaken has shown that there would not be any demonstrable harm arising from the proposed scheme and it will not cause any severe impacts. Therefore there are no traffic and transport related reasons why the development should not be granted planning consent.

Gateway TSP

FIGURES

Botwell Lane, Hayes
Weekday Evening Peak Hour (16:30 - 17:30) - 2015 Observed Flow

Figure 3.3

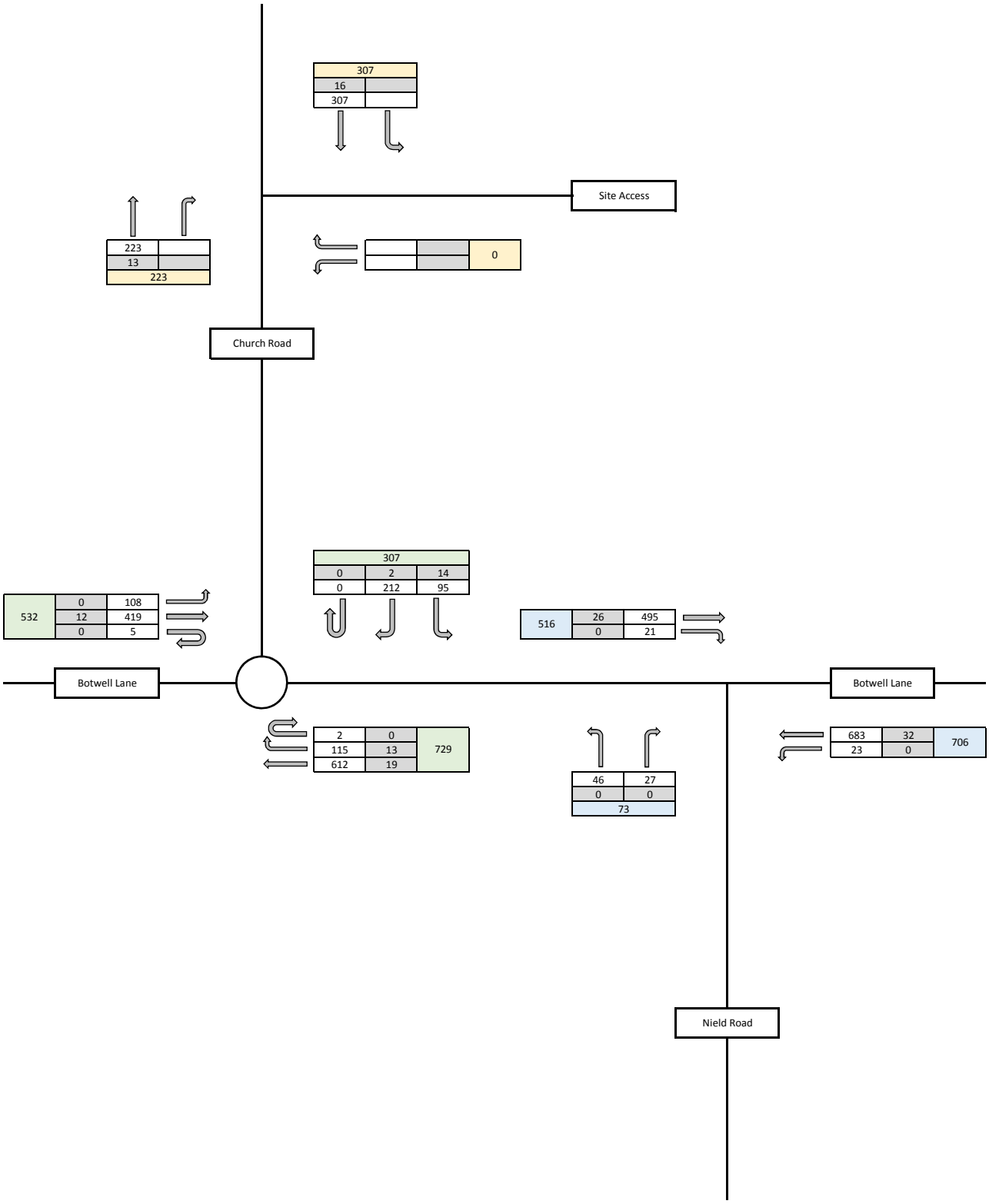


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm

Botwell Lane, Hayes
Saturday Daytime Peak Hour (12:45 - 13:45) - 2015 Observed Flow

Figure 3.4

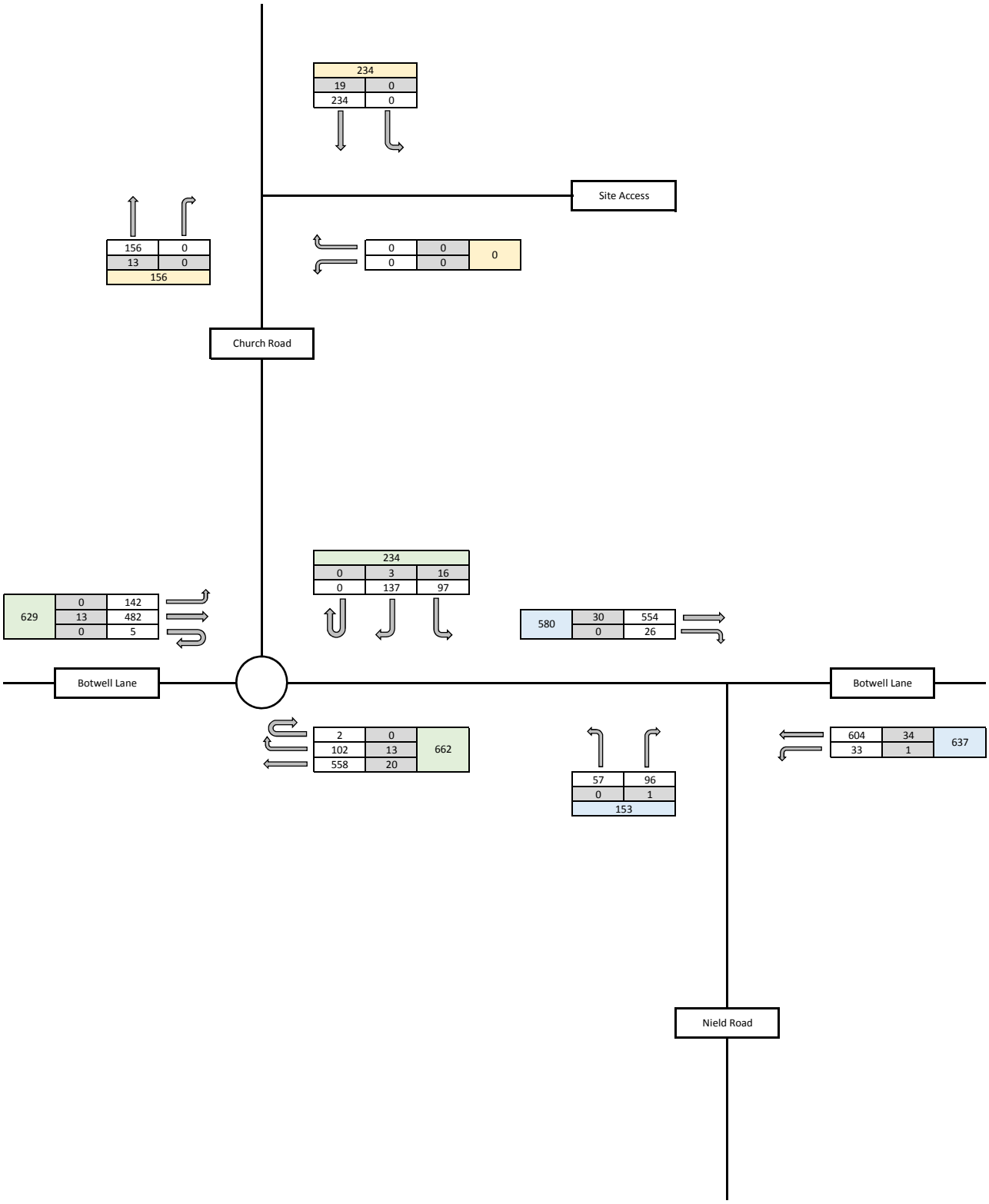


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm

Botwell Lane, Hayes
Weekday Evening Peak Hour (16:30 - 17:30) - 2016 Uplifted Flow

Figure 3.5

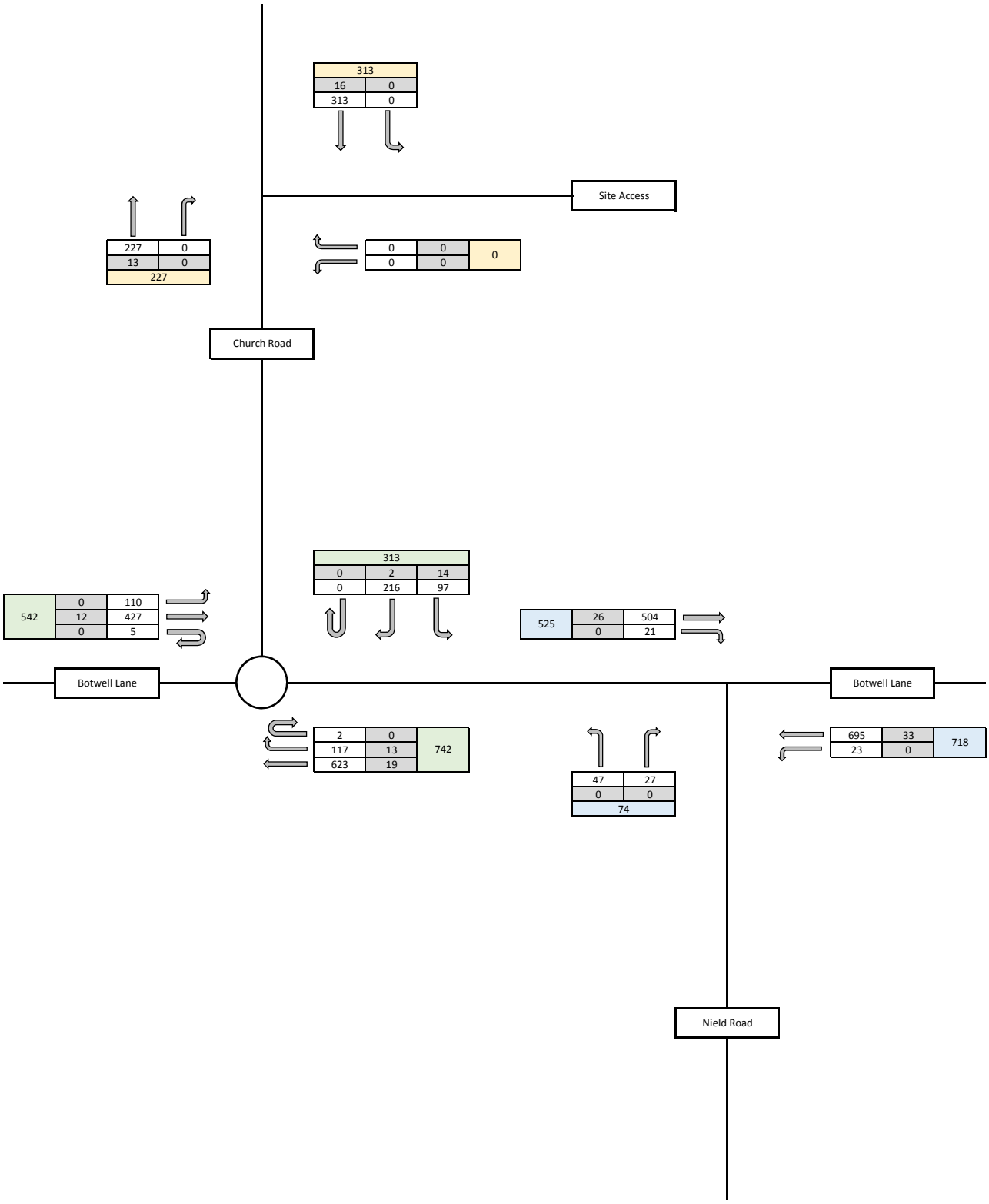


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm
1.0174	Growth Factor

Botwell Lane, Hayes
Saturday Daytime Peak Hour (12:45 - 13:45) - 2016 Uplifted Flow

Figure 3.6

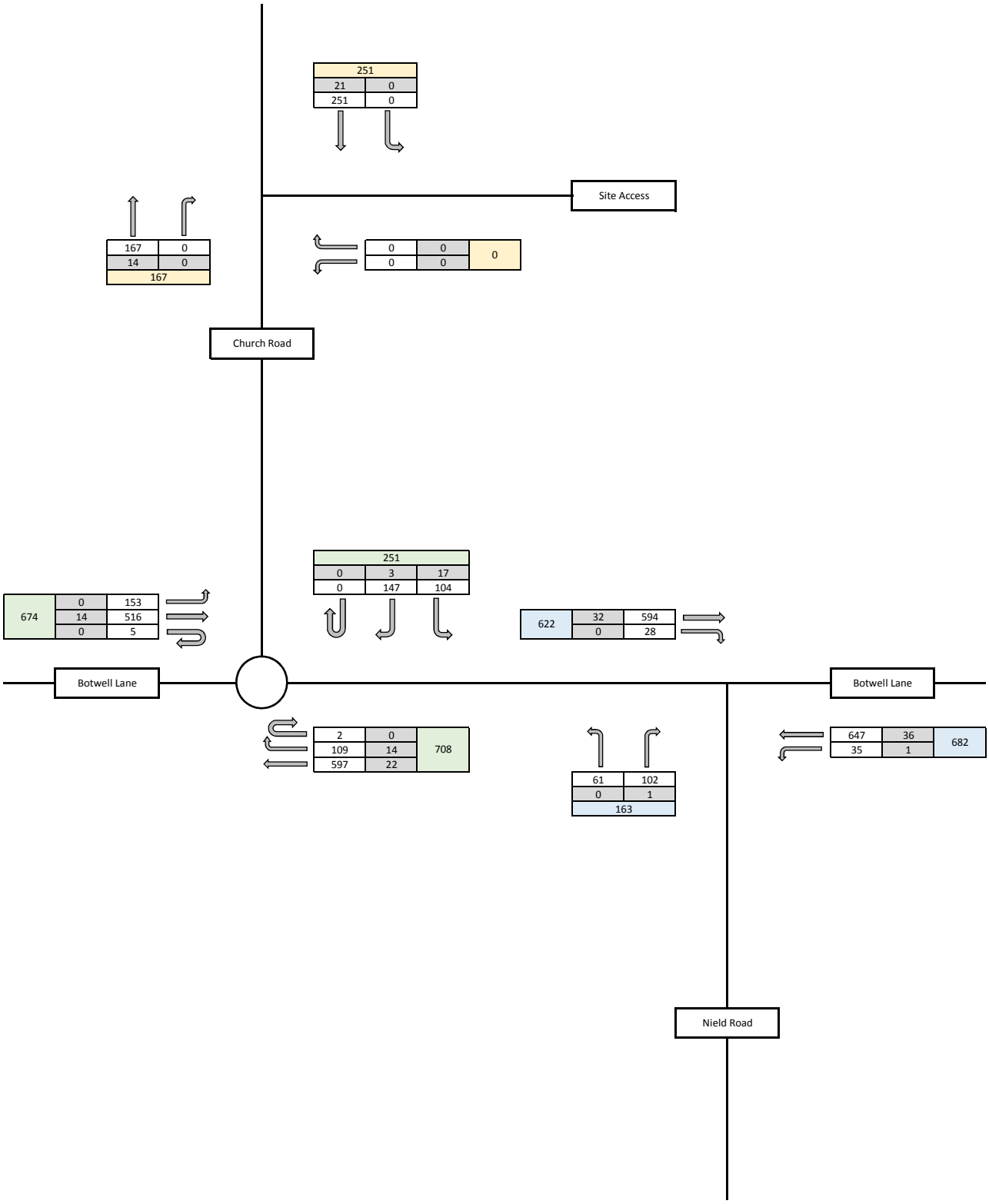


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm
1.0183	Growth Factor

Botwell Lane, Hayes
Weekday Evening Peak Hour (16:30 - 17:30) - 2020 Uplifted Flow

Figure 3.7

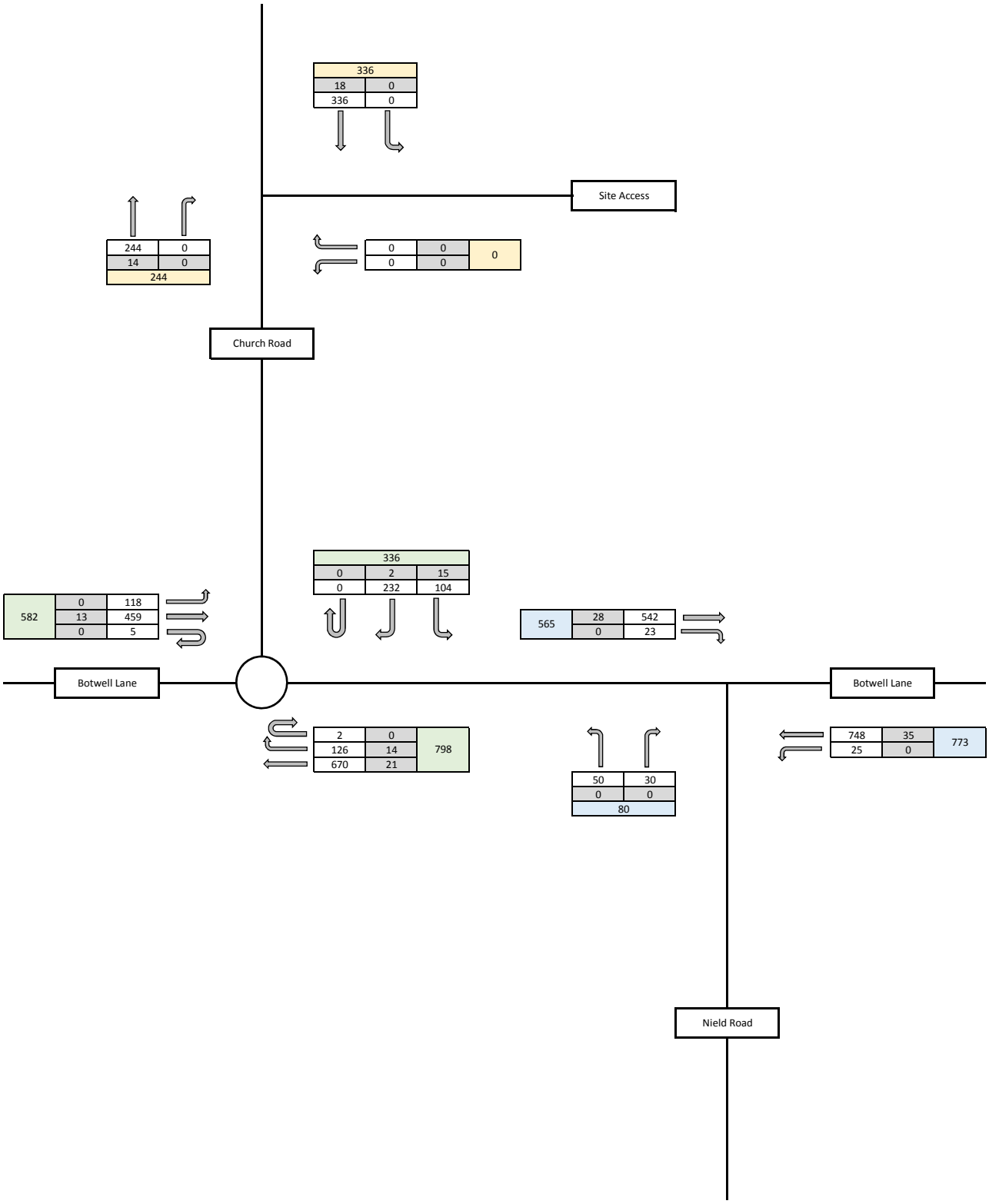


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm
1.0897	Growth Factor

Botwell Lane, Hayes
Saturday Daytime Peak Hour (12:45 - 13:45) - 2020 Uplifted Flow

Figure 3.8

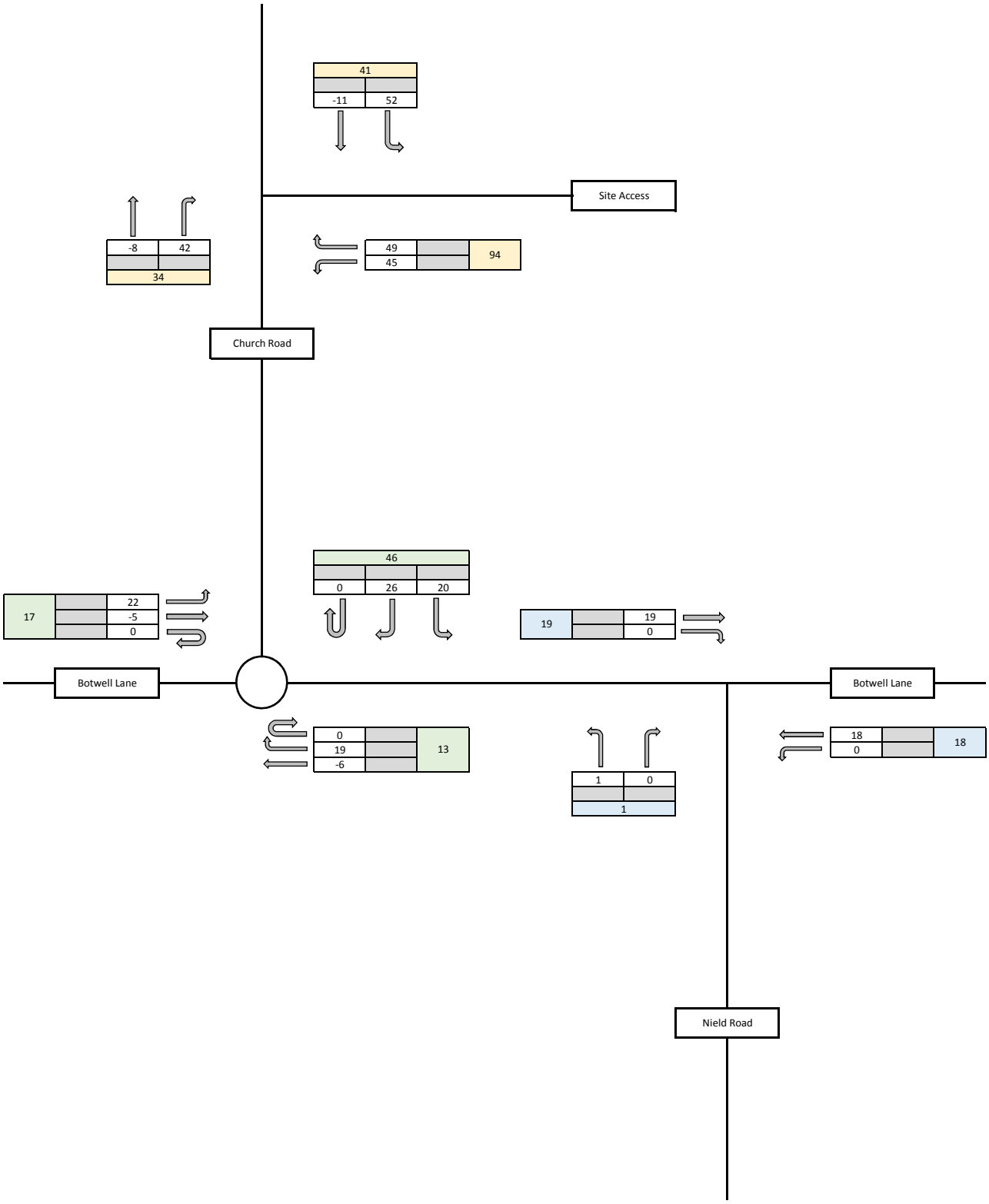


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm
1.0955	Growth Factor

Botwell Lane, Hayes
Weekday Evening Peak Hour (16:30 - 17:30) - Foodstore Total Trips

Figure 5.1

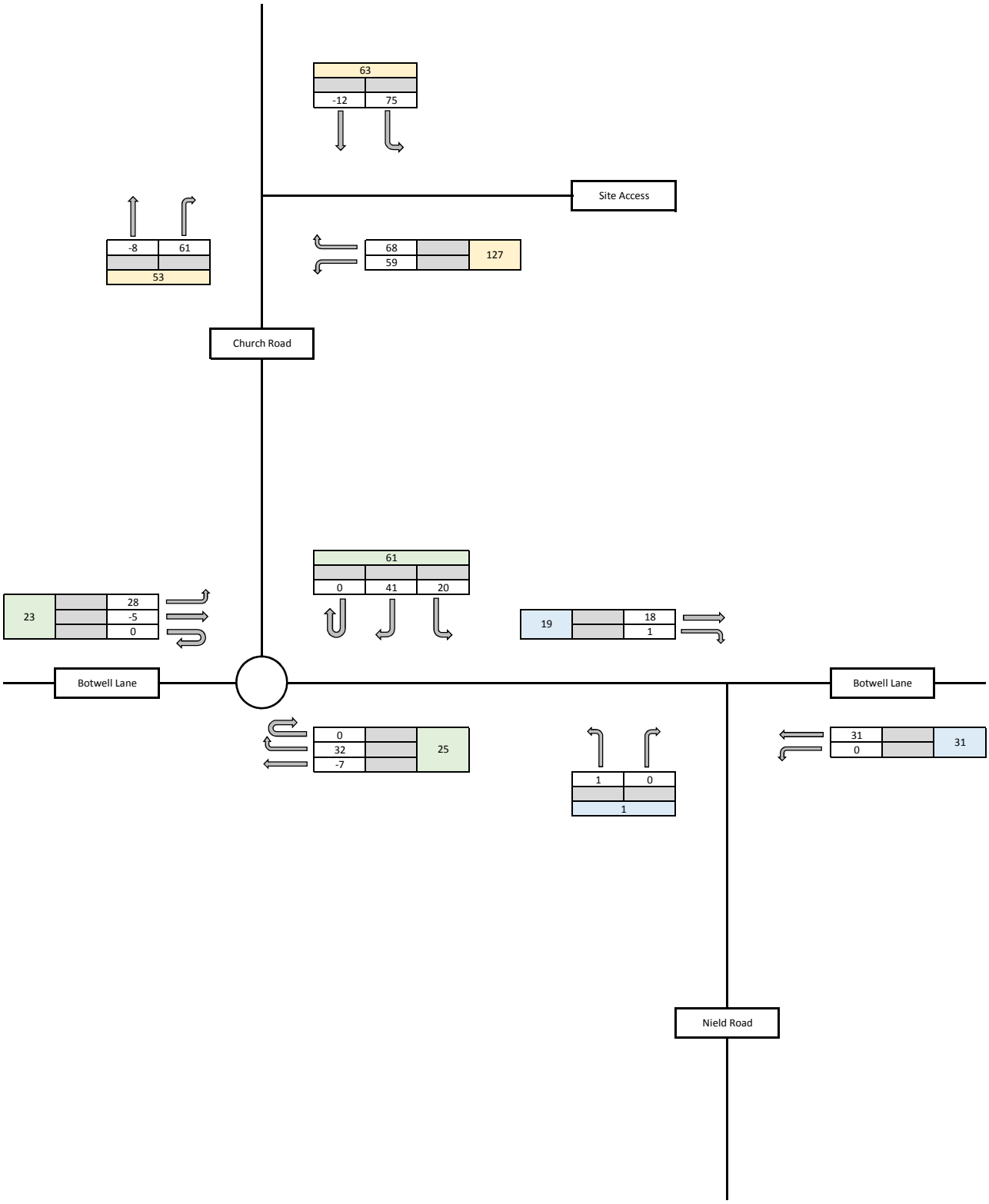


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm

Botwell Lane, Hayes
Saturday Daytime Peak Hour (12:45 - 13:45) - Foodstore Total Trips

Figure 5.2

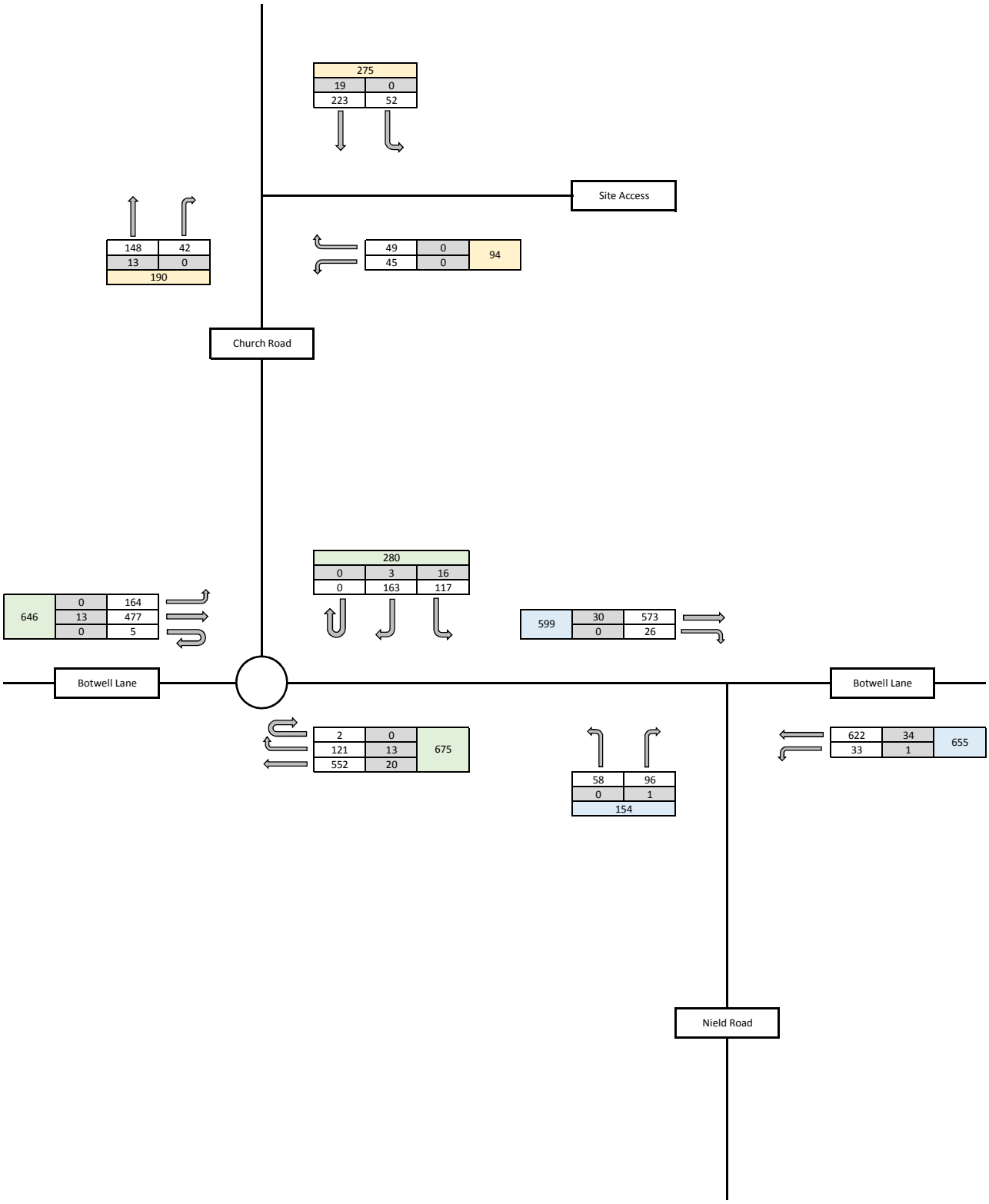


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm

Botwell Lane, Hayes
Weekday Evening Peak Hour (16:30 - 17:30) - 2016 Uplifted Baseline with Proposed Development

Figure 5.3

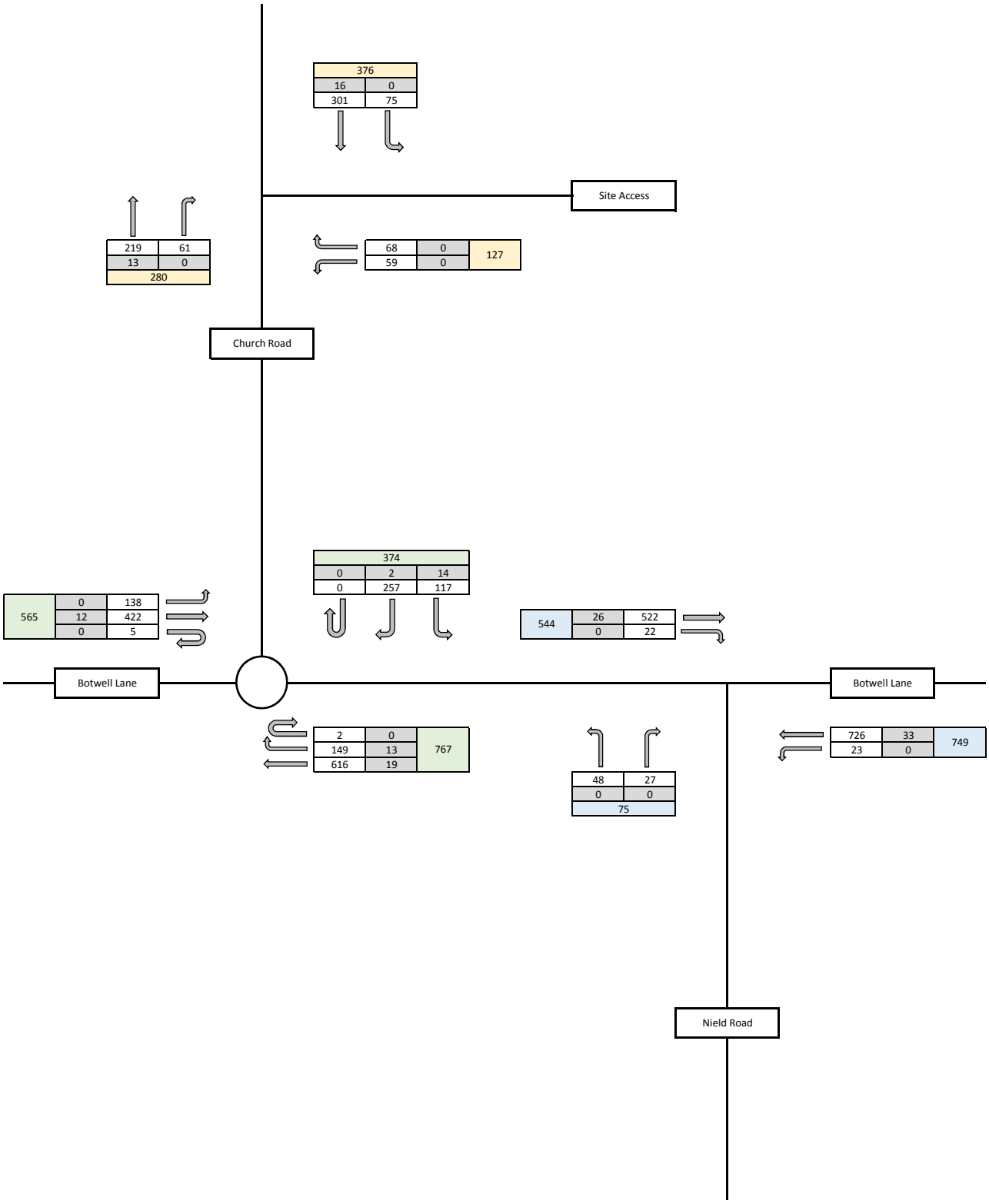


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm

Botwell Lane, Hayes
Saturday Daytime Peak Hour(12:45 - 13:45) - 2016 Uplifted Baseline with Proposed Development

Figure 5.4

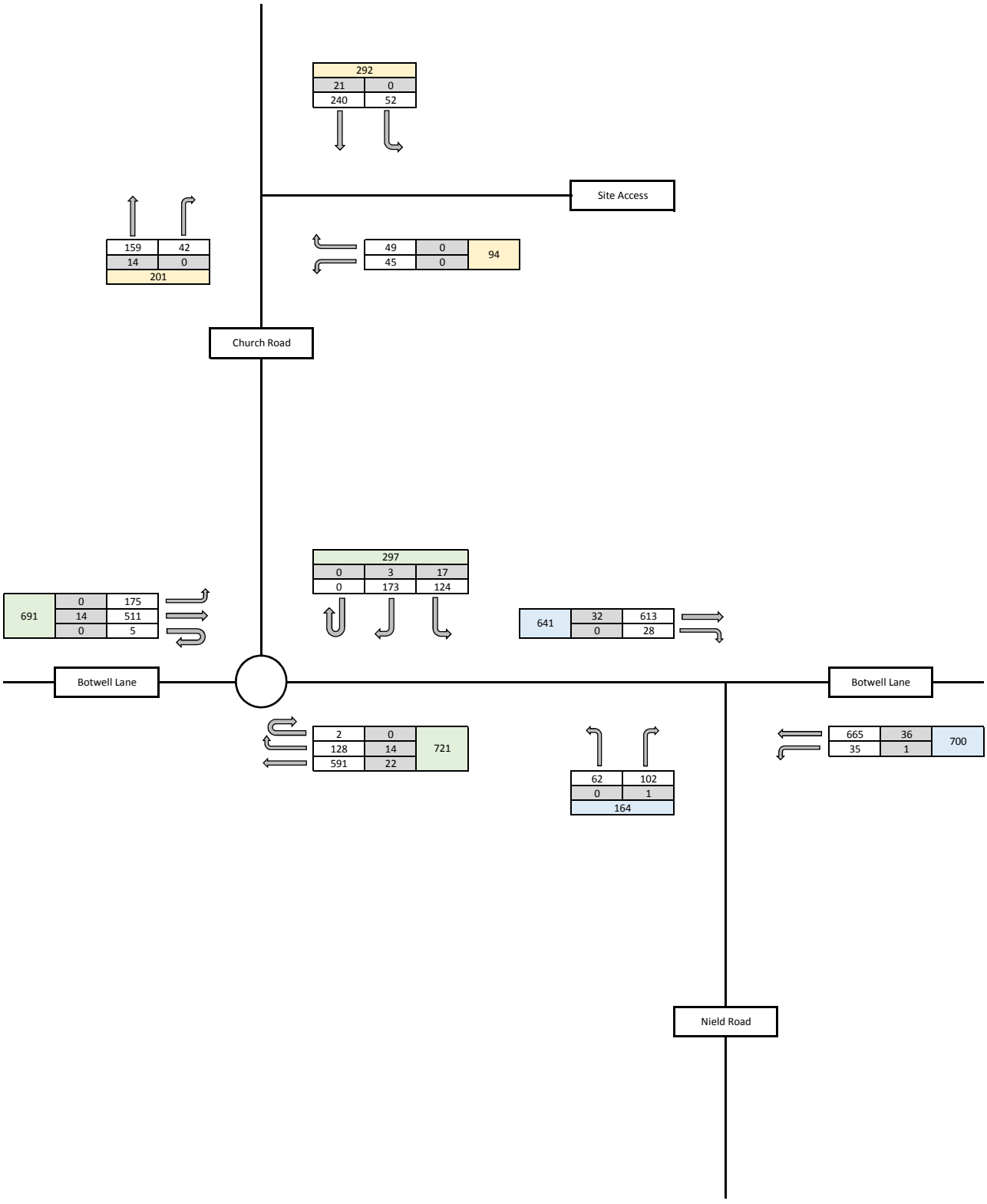


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm

Botwell Lane, Hayes
Weekday Evening Peak Hour (16:30 - 17:30) - 2020 Uplifted Baseline with Proposed Development

Figure 5.5

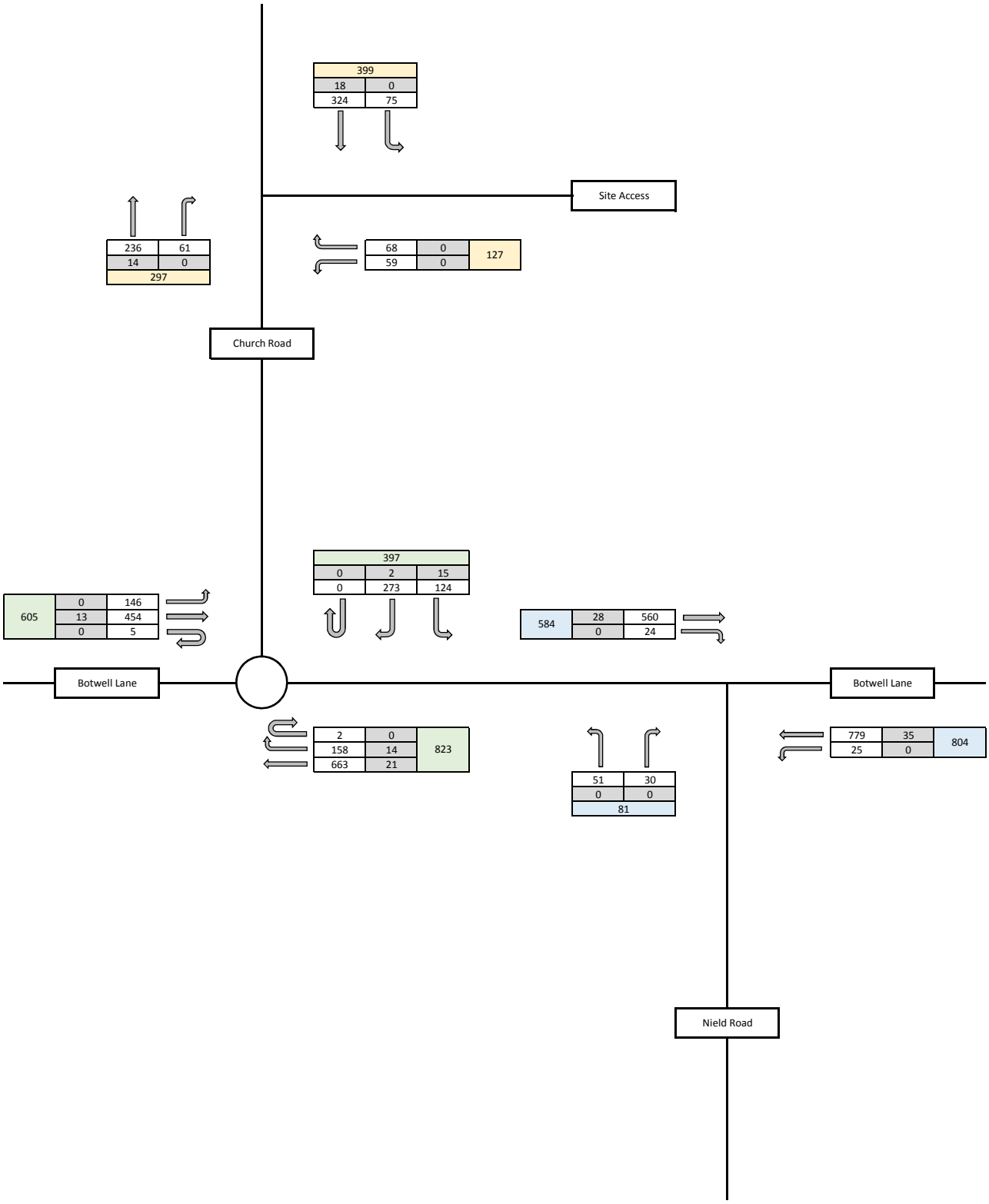


Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm

Botwell Lane, Hayes
Saturday Daytime Peak Hour (12:45 - 13:45) - 2020 Uplifted Baseline with Proposed Development

Figure 5.6



Key

0	Total Vehicles
0	HGV's
0	Total Vehicles on Arm