



NHS Property Services

Former Clitheroe Hospital, Chatburn Road, Clitheroe

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Transport Assessment

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1. Introduction

1.1 Background

- 1.1.1 WYG has been appointed by NHS Property Services to prepare a Transport Assessment (TA) to accompany an outline planning application for 50 residential dwellings on land south of Chatburn Road, Clitheroe.
- 1.1.2 The site is located approximately 1.5km north east of Clitheroe town centre. The location of the site is shown on **Plan 1**.
- 1.1.3 Lancashire County Council (LCC) act as the Local Highway Authority (LHA) and Ribble Valley Borough Council as the Local Planning Authority (LPA).

1.2 Scope of Assessment

- 1.2.1 The methodology within this report broadly adopts the guidance set out in the Department for Transport (DfT) 'Guidelines for Transport Assessment (2007)' and also takes account of more recently published policy set out in the National Planning Policy Framework (NPPF) and the supporting National Planning Practice Guidance Notes (NPPG).
- 1.2.2 Scoping discussions on a potential residential application for up to 100 dwellings on the site were undertaken with the LHA in November 2015 with the LHA replying that amongst other things, a full analysis needed to be undertaken at a number of junctions on the external highway network. This was because the application (at the time) exceeded the 'comprehensive Transport Assessment submission threshold' of 80 units.

The size of the proposed development has now reduced and the proposals no longer fall above this threshold. As such in recent pre-application discussions, the LHA have stated that a Transport Statement is now sufficient for a development of this size.

1.3 Report Structure

- 1.3.1 This TS is structured as follows:



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- **Section 2** outlines national and local policy relevant to the development proposals.
- **Section 3** describes the existing site conditions on and around the site including the local highway network and reviews the local highway's safety record.
- **Section 4** sets out the accessibility of the site to sustainable forms of transport.
- **Section 5** provides a description of the development proposals including access strategy.
- **Section 6** Estimates future traffic levels on the local highway network including predicting the volume of traffic that the proposed development could generate.
- **Section 7** Provides an assessment of the predicted impact of the development on the local highway network.

1.3.2 The TS is summarised and concludes in **Section 8**, which describes how the proposals adhere to current policy and guidance and sets out why there are no transportation or highway reasons why the proposed development should not be approved.



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2. National and Local Policy Context

2.1 Background

2.1.1 This section of the TA reviews the relevant transportation planning policy and guidance documents in the context of the proposed development site, with reference to the following documents:

- National Planning Policy Framework (2012)
- National Planning Practice Guidance (2014)
- A Local Plan for Ribble Valley – Core Strategy (2008 – 2028)
- Lancashire Local Transport Plan (May 2011)

2.1.2 The subsequent sections of this report demonstrate that the proposals are consistent with the above documents.

2.2 National Planning Policy Framework

2.2.1 The Department for Communities and Local Government published its National Planning Policy Framework (NPPF) in 2012. The NPPF replaces previous Planning Policy Guidance (PPG) Notes and Planning Policy Statements (PPS) with a single document.

2.2.2 Local authorities are expected to grant permission, using the NPPF where the Local Plan is absent, silent, indeterminate or where relevant policies are out of date, unless the adverse effects of granting planning permission significantly and demonstrably outweigh the benefits of the scheme.

2.2.3 At the heart of NPPF is:

'a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking' (paragraph 14).

2.2.4 NPPF also states in paragraph 15 that:



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“policies in Local Plans should follow the approach of the presumption in favour of sustainable development so that it is clear that development which is sustainable can be approved without delay. All plans should be based upon and reflect the presumption in favour of sustainable development, with clear policies that will guide how the presumption should be applied locally” (Paragraph 29).

2.2.5 NPPF states that development planning should:

- *‘...give people a real choice about how they travel’ (paragraph 29).*
- *‘ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised’ (paragraph 34).*
- *‘developments should be located and designed where practical to give priority to pedestrians and cycle movements, and have access to high quality public transport facilities’ (paragraph 35).*

2.2.6 NPPF sets out a key test in Paragraph 32 for the acceptability of planning applications in terms of highway impact. It states that:

- *‘Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe’ (Paragraph 32).*

2.2.7 It is therefore clear from the NPPF that development:

- Should be capable of being accessed satisfactorily with safe and suitable access provided for all.
- Should be sustainable, with preference given to accessibility by sustainable modes of transport.
- Should not be prevented unless the residual cumulative impacts of the development are ‘severe’.

2.2.8 It will be demonstrated in the subsequent sections of this TA that the site is located close to pedestrian, cycle and public transport networks and is therefore accessible by sustainable modes of travel. Furthermore, detailed junction capacity assessments demonstrate that the proposals will not have a ‘severe’ impact on the adjoining highway network.



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2.3 National Planning Practice Guidance Travel Plans, Transport Assessments and Statements in Decision – Taking

2.3.1 The National Planning Practice Guidance (NPPG) web-based resource was published on 6 March 2014 by the Department for Communities and Local Government (DCLG). This resource collates relevant planning practice guidance and provides links between the NPPF and relevant legislation and guidance.

2.3.2 In terms of transportation, the guidance on *'Travel Plans, Transport Assessments and Statements in Decision-Taking'* is relevant to the proposals. It essentially replaces the DFT's *'Guidance on Transport Assessment'* (2007) and states in Paragraph 005 that:

- *"Transport Assessments and Transport Statements primarily focus on evaluating the potential transport impacts of a development proposal. (They may consider those impacts net of any reductions likely to arise from the implementation of a Travel Plan, though producing a Travel Plan is not always required). The Transport Assessment or Transport Statement may propose mitigation measures where these are necessary to avoid unacceptable or "severe" impacts. Travel Plans can play an effective role in taking forward those mitigation measures which relate to on-going occupation and operation of the development."*
- *Transport Assessments and Statements can be used to establish whether the residual transport impacts of a proposed development are likely to be "severe", which may be grounds for refusal, in accordance with the National Planning Policy Framework".*

2.3.3 Paragraph 014 provides guidance on establishing the need and scope of a Transport Assessment or Statements. It states that:

- *"The need for, scale, scope and level of detail required of a Transport Assessment or Statement should be established as early in the development management process as possible as this may positively influence the overall nature or the detailed design of the development."*

2.3.4 Paragraph 014 goes on to state that the key issues to consider at the start of preparing a Transport Assessment are as follows:



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- *The planning context of the development proposal;*
 - *Appropriate study parameters (i.e. area, scope and duration of study);*
 - *Assessment of public transport capacity, walking/ cycling capacity and road network capacity;*
 - *Road trip generation and trip distribution methodologies and/ or assumptions about the development proposal;*
 - *Measures to promote sustainable travel;*
 - *Safety implications of development; and*
 - *Mitigation measures (where applicable) – including scope and implementation strategy.*
- Regarding treatment of cumulative impact of development, the NPPG also states in Paragraph 014 that:

It is important to give appropriate consideration to the cumulative impacts arising from other committed development (i.e. development that is consented or allocated where there is a reasonable degree of certainty will proceed within the next three years). At the decision-taking stage this may require the developer to carry out an assessment of the impact of those adopted Local Plan allocations which have the potential to impact on the same sections of transport network as well as other relevant local sites benefitting from as yet unimplemented planning approval."

2.4 A Local Plan for Ribble Valley Core Strategy (2008 – 2028)

- 2.4.1 The Core Strategy for Ribble Valley is the central document to the Local Development Framework and it establishes the vision, underlying objectives and key principles that will guide the development of the area.
- 2.4.2 Key Statements that relate to development and transport are listed below as stated within the Core Strategy.
- 2.4.3 'Key Statement DS2' relates to sustainable development and is as follows:

"When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean



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that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area."

2.4.4 'Key Statement H1' relates to housing and is as follows:

"Land for residential development will be made available to deliver 5,600 dwellings, estimated at an average annual completion target of at least 280 dwellings per year over the period 2008 to 2028 in accordance with baseline information."

2.4.5 'Key Statement DMI2' relates to transport and is as follows:

"New development should be located to minimise the need to travel. Also it should incorporate good access by foot and cycle and have convenient links to public transport to reduce the need for travel by private car.

In general, schemes offering opportunities for more sustainable means of transport and sustainable travel improvements will be supported. Sites for potential future railway stations at Chatburn and Gisburn will be protected from inappropriate development.

Major applications should always be accompanied by a comprehensive travel plan."

2.5 The Lancashire County Council Local Transport Plan (2011-2021)

2.5.1 The Lancashire County Council Local Transport Plan 3 (LTP3) was adopted in May 2011. The Plan sets out LCC's transport vision for the next 10 years.

2.5.2 The LTP states that the main transport challenges facing the area over the next 10 years are:

- The need to support economic growth and regeneration across the county by tackling poor connectivity, congestion and poorer parts of the network which makes travel difficult.
- Providing access to skills and education.
- Fear of crime and antisocial behaviour in some public places and using public transport, particularly at night.



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- Poor access to services and social networks for vulnerable and isolated communities in our towns and rural areas.
- Addressing the transport needs of an ageing population.
- Relatively high costs of public transport for certain groups.
- Negative impacts of traffic and transport on communities and the public realm.
- High dependency on the car for personal travel.
- High levels of carbon emissions.
- Road casualties among children.
- The fear of traffic which deters people from cycling and walking.
- Maintaining a safe and efficient road network.

2.5.3 The council aims to overcome these challenges by setting out the following transport goals:

- To help to secure a strong economic future by making transport and travel into and between our major economic centres more effective and efficient and by improving links to neighbouring major economic areas and beyond.
- To provide all sections of the community with safe and convenient access to the services, jobs, health, leisure and educational opportunities that they need.
- To improve the accessibility, availability and affordability of transport as a contribution to the development of strong and cohesive communities.
- To create more attractive neighbourhoods by reducing the impact of transport on our quality of life and by improving our public realm.
- To reduce the carbon impact of Lancashire's transport requirements, whilst delivering sustainable value for money transport options to those who need them.
- To make walking and cycling more safe, convenient and attractive, particularly in the more disadvantaged areas of Lancashire, bringing improvements in the health of Lancashire's residents.
- To provide value for money by prioritising the maintenance and improvement of Lancashire's existing transport infrastructure where it can help to deliver our transport goals.



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2.6 Compliance with Policy

- 2.6.1 Subsequent sections of this report describe the development proposals and surrounding existing sustainable transport facilities such as pedestrian/cycle routes and existing public transport provision.
- 2.6.2 Additionally, this report assesses whether there are any significant highway impacts as a result of the development proposals. The report goes on to evaluate whether the proposals comply with the NPPF transport planning 'test' which prevents refusal on transport grounds unless the residual impacts of development are 'severe'.



3. Existing Conditions

3.1 Introduction

3.1.1 This section of the TS describes the existing site and existing local highway network including existing traffic flows and speeds and the local highway's safety record.

3.2 Existing Site

3.2.1 The development site is located approximately 1.5km north east of Clitheroe town centre. **Plan 1** illustrates the location of the site in relation to the surrounding area while **Plan 2** shows the location of the site in the context of the local highway network surrounding the site.

3.2.2 The site is currently occupied by vacant hospital buildings which will be demolished as part of the proposals. The site is bounded by the A671 Chatburn Road to the northwest, open fields to the southwest, retail/industrial units to the southeast and Clitheroe Community Hospital to the northeast.

3.3 Local Highway Network

3.3.1 The existing highway network which comprises the study area is identified on **Plan 2** and the key roads and associated junctions are described in detail below.

3.3.2 The A671 Chatburn Road runs south west to north east along the north western boundary of the site. This road is subject to a 30mph speed limit, has footways on both sides of the carriageway and street lighting is provided. The A671 Chatburn Road provides a route to Clitheroe town centre approximately 1.5km south west of the site and to Chatburn approximately 1.7km to the northeast.

3.3.3 The A671 Chatburn Road intersects with the A671 Pimlico Link Road at a roundabout approximately 90m northeast of the site. A671 Pimlico Link Road is subject to a 40mph speed limit, has a footway on the western side of the carriageway and street lighting is provided. The A671 Pimlico Link Road provides a route to the A59 and Worston approximately 1.25km southeast of the A671 Chatburn Road.



3.3.4 The junction of the A671 Pimlico Link Road and the A59 is controlled via a priority controlled T-junction which has ghost right turn lane on the A59 incorporated into its layout. The A59 is subject to a 60mph speed limit and street lighting is provided. The A59 provides a route to Gisburn and Skipton approximately 9.5km and 24km northeast of the site, and Whalley and Preston approximately 7km and 24km southwest of the site.

3.4 Background Traffic Flows

3.4.1 In order to gain an understanding of existing traffic conditions on the local highway network, ATC volume/speed surveys were commissioned on the A671 Chatburn Road adjacent to the site and manual classified junction count surveys (MCJC) commissioned at the following junctions (the survey data is included in **Appendix A**):

- A671 Chatburn Road / Clitheroe Hospital Site Access T-junction
- A671 Pimlico Link Road / A671 Chatburn Road Roundabout
- Deanfield / A671 Pimlico Link Road T-junction
- Lincoln Way / A671 Pimlico Link Road T-junction

3.4.2 The ATC surveys were undertaken between Monday 30th November 2015 and Sunday 6th December 2015 while the MCJC surveys were undertaken on Wednesday 2nd December 2015 between 07:45 and 09:30 and 15:45 and 18:15. Analysis of the traffic survey data demonstrated that the peak hours on the highway network are as follows:

- AM peak hour between 08:00 to 09:00
- PM peak hour between 15:45 to 16:45

3.4.3 **Table 3.1** summarises the traffic flows collected from the ATC survey during the traditional weekday AM and PM peak periods while average and 85th percentile speeds averaged over the duration of the survey are summarised in **Table 3.2**.

Table 3.1 – Weekday Average Traffic Flows (Vehicles)

	AM Peak (8:00 – 9:00)	PM Peak (16:00 – 17:00)
Chatburn Road (Eastbound)	361	331
Chatburn Road (Westbound)	393	428
Total 2-Way	754	759



Table 3.2 – Average Speeds (mph)

	Average Speeds	85 th Percentile Speeds
Chatburn Road (Eastbound)	35.3	41.1
Chatburn Road (Westbound)	33.3	39.3

3.4.4 **Table 3.1** shows that the number of vehicles travelling along Chatburn Road past the site is relatively low with a traffic flow of only around 13 vehicles per minute (2 way) during the highest peak period (i.e. weekday PM peak period).

3.4.5 **Table 3.2** shows that the average speeds observed travelling along Chatburn Road are slightly higher than the posted speed limit of 30mph but with 85th percentile speeds being over 10mph above the road’s speed limit (eastbound).

3.4.6 The observed 85th percentile speeds have been used to determine the visibility splay required for the proposed site access junction which is discussed in greater detail in **Section 5**.

3.5 Personal Injury Accident Review

3.5.1 Personal Injury Accident data (PIA) for a five year period between 2011 and 2015 has been collated and analysed by individual junctions and links. The assessment includes the A671 Chatburn Road, Pimlico Link Road, Lincoln Way, Clitheroe Road and Deanfield.

3.5.2 The PIA data together with the location of the accidents are contained in **Appendix B** while the severity of accidents over the five year period are summarised in **Table 3.3**.

Table Error! No text of specified style in document..3 - Summary of Accident Data

Year	2011	2012	2013	2014	2015	Total
Fatal	0	0	0	0	0	0
Serious	0	0	0	1	0	1
Slight	1	2	1	2	2	8
Total	1	2	1	3	2	9

3.5.3 **Table 3.3** shows that a total of nine PIA’s were reported in the study area during the five year period, eight of which were classified as ‘slight’ injury while one was classified as series. No PIA’s were classified as ‘Fatal’.



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3.5.4 A detailed analysis of each individual section of road is provided below to ascertain any specific highway safety concerns within the area.

A671 Chatburn Road

3.5.5 Four 'slight' and one 'serious' PIA's took place on this road in the vicinity of the site during the study period.

3.5.6 The 'serious' PIA took place in December 2014 at the A671 Chatburn Road / Clitheroe Hospital Site Access T-junction. The accident occurred on a rainy day and involved four vehicles where one vehicle drifted over the centre line into the second vehicle causing a collision with the third vehicle striking a parked up car. Three casualties were involved where only one was considered 'serious'.

3.5.7 The four 'slight' accidents occurred in daylight hours during days where the weather was fine and there were no high winds. All four accidents took place on the Pimlico Link Road / A671 Chatburn Road Roundabout. Two of the accidents were due to vehicles entering the roundabout when they did not have priority, one accident was due to a driver driving over the speed limit and one accident was due to a health issue whilst driving. Each accident only involved one casualty.

Pimlico Link Road

3.5.8 Only one 'slight' PIA took place on this road during the five year study period, in July 2015. The accident involved one vehicle and one cyclist and occurred at temporary traffic lights. It is unclear as to which vehicle had priority.

Lincoln Way

3.5.9 Only one 'slight' PIA took place on this road during the study period, in November 2012. The accident involved two vehicles where one attempted to overtake the other while the vehicle was turning.

Clitheroe Road

3.5.10 Only one 'slight' PIA occurred on this road during the study period which occurred during daylight hours. The accident involved a car and a cyclist and occurred whilst the cyclist was turning right out of the Pimlico Link Road / Chatburn Road junction when it collided with a car travelling from the left.



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Deanfield

3.5.11 There are no reported accidents on this road during the five year study period.

3.5.12 Given the nature of the local highway network, nine injury accidents on the road network included in the study area over a five year period is not considered to be untypical. This indicates that the road network surrounding the site has a good safety record.



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4. Accessibility by Sustainable Modes

4.1 Background

4.1.1 Paragraph 29 of the National Planning Policy Framework states that: 'The transport system needs to be balanced in favour of sustainable transport modes, giving people real choice about how they travel'.

4.1.2 To demonstrate the site's compliance with the above, this section of the report examines the accessibility of the site by non-car modes of transport and as such, the accessibility of the site has been considered in relation to the following modes of transport:

- Pedestrian
- Cycling
- Public Transport

4.2 Accessibility on Foot

4.2.1 It should be noted that the Institution of Highways and Transportation (IHT) in their document 'Guidelines for Providing for Journeys on Foot' state that '*walking accounts for over a quarter of all journeys and four fifths of journeys less than one mile*' (i.e. 1.6km) (paragraph 1.12). This confirms that if people are travelling 1.6km on a journey, four fifths are likely to walk.

4.2.2 Furthermore, Planning Policy Guidance 13 (PPG13) now revoked, recognised that walking is the most important mode of travel at a local level and offers the most sustainable alternative to short car trips, particularly those under 2km. This recognition is still applicable and widely accepted. The implication of this is that 2km is a distance that people will walk to access an amenity/facility. 2km is also the IHT guidance preferred maximum suggested walking distance to schools and for commuting.

4.2.3 In respect of the above, **Plan 3** has been prepared which illustrates a 2km (24 min) walking catchment from the site and provides an indication of the areas which are within walking distance of the centre of the site. The plan also shows the 400m (4.8 min) and 800m (9.6 min) walking catchment from the site. The indicative walking speed has been taken from the IHT 'Guidelines for



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Journeys on Foot' which states that an average walking speed of 1.4 m/s can be assumed in most cases.

- 4.2.1 **Plan 3** shows that Clitheroe town centre falls within the 2km walking catchment which means that its amenities are within walking distance of the site. This includes several pharmacies, a medical centre, restaurants, take-aways, convenience stores, pubs, a leisure centre and a post office. Clitheroe Train Station is also within a 2km walking catchment.
- 4.2.2 The village of Chatburn is also within a 2km walking catchment where there are also several pubs and a post office.
- 4.2.3 **Plan 3** shows that Clitheroe Royal Grammar School is within an 800m walking catchment of the site while there are several primary schools including Moorland School, Pendle Primary School, Clitheroe Brookside School and St Johns RC Primary School located within the 2km walking catchment.
- 4.2.4 **Table 4.1** shows the walking time and distance to a selection of local amenities.

Table 4.1 Summary of Local Amenities

Amenity	Walk Distance	Walk Time (minutes)
Bus Stop	15m	0.18
Primary School	460m	6
High school	460m	6
Leisure Centre	840m	10
Post Office	1650m	20
Restaurant / Take-away	880m	11
Pharmacy	1560m	19
Medical Centre	1760m	21

- 4.2.5 Based on the above it can be concluded that the site is located in an area which has good pedestrian provision and where there are a good selection of local amenities and services within walking distance. It is therefore concluded that the site is accessible on foot thereby according with policies contained within the NPPF.



4.3 Accessibility by Cycle

- 4.3.1 It is generally accepted that cycling has the greatest potential to substitute for short car trips, particularly those less than 5km and to form part of a longer journey by public transport.
- 4.3.2 A 5km catchment of the site has been prepared and is shown in **Plan 4**. The site is well situated to encourage trips by cycle with a number of amenities and services located within the 5km distance. Additionally, the road network in the vicinity of the site is relatively cycle friendly with the surrounding area having a number of lightly trafficked roads.
- 4.3.3 **Plan 4** provides an illustrative indication of the areas which can be easily accessed by cycle. It shows that within the 5km cycling catchment is the whole of Clitheroe town centre meaning its amenities and facilities can be easily accessed by bike.
- 4.3.4 Neighbouring areas including Worston, Lower Standen, Pendleton, Barrow, Waddington, West Bradford, Gridleton, Sawley and Downham are also located within the 5km cycling catchment.
- 4.3.5 **Plan 4** also illustrates a number of cycle routes within the vicinity of the site. Regional Route 91 is located approximately 1.5km south east of the site and runs to Downham approximately 3km to the north east of the site, Barnoldswick approximately 12km north east of the site, Whalley approximately 7km south west of the site and to Brownhill approximately 13km south west of the site. The route is mainly on-road.
- 4.3.6 Regional Route 90 is located approximately 2.5km north west of the site. This route, which is mainly 'on-road', runs to West Bradbury approximately 3km north west of the site, Holden approximately 8km north of the site, and to Longridge approximately 15km south west of the site.
- 4.3.7 Based on the above it is evident that the site is well located to encourage trips by cycle. It is located close to a number of existing cycle routes and facilities and has a wide range of amenities and local facilities such as schools, employment, retail and leisure areas within a reasonable cycling distance. Therefore the site can be considered to be very accessible by cycle.



4.4 Accessibility by Public Transport

Accessibility by Bus

- 4.4.1 The nearest bus stops to the site are located on the north western boundary of the site on Chatburn Road. These bus stops benefit from having a seated shelter with a flag and pole with bus route information provided.
- 4.4.2 There are additional bus stops located on Chatburn Road adjacent to Clitheroe Royal Grammar School approximately 530m southwest of the proposed development. The location of bus stops within a km radius of the site are shown on **Plan 5**.
- 4.4.3 **Table 4.2** provides a summary of bus services which utilise stops located close to the site.

Table 4.2 Summary of Existing Bus Services

Service No.	Service Description	One-way Frequency (mins)				
		AM Peak	Inter-peak	PM Peak	Saturday	Sunday
Bus Services stopping at Bus Stops adjacent to the Site						
280/ X80	Preston-Skipton via Whalley, Clitheroe	30	60	60	60	60
Bus Services Stopping at Bus Stops adjacent to Clitheroe Royal Grammar (530m from the site)						
280/ X80	Preston-Skipton via Whalley, Clitheroe	30	60	60	60	60
14	Accrington - Gt Harwood - Whalley - Clitheroe	60	60	60	-	-
15	Accrington - Great Harwood - Whalley - Clitheroe	60	60	60	120	-
4	Clitheroe - Whalley - Sabden - Padiham	-	-	1 service	-	-
M2	Clitheroe - Padiham - Burnley - Colne	30	30	30	30	60
22	Blackburn - Whalley - Clitheroe	30	30	30	30	60

- 4.4.4 **Table 4.2** shows that there are six bus services which can be caught from bus stops that are within walking distance of the site which provide a combined frequency of at least eight buses per hour during the weekday AM peak period and at least seven buses per hour in the weekday PM peak period. On a Saturday there is a combined frequency of at least five buses per hour, and on a Sunday there is a combined frequency of three buses per hour.



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- 4.4.5 **Table 4.2** confirms that a number of key destinations can be accessed via bus from the site including Clitheroe town centre, Whalley, Preston, Blackburn, Burnley and Accrington. This provides the opportunity for future residents of the proposed development to travel by sustainable modes.
- 4.4.6 It should be also be noted that Clitheroe town centre (inc. Clitheroe Bus Interchange) is located within a reasonable walking distance of the site where more bus services can be accessed by the residents of the future site.

Accessibility by Rail

- 4.4.7 The nearest railway station to the site is Clitheroe Rail Station which is located approximately 1.8km to the south west. Clitheroe Rail Station is within the site's 2km walking catchment and therefore could potentially encourage future residents to use rail as part of a wider journey. Clitheroe Rail Station is also accessible via bus services X80/280, 14 and M2 from bus stops located close to the site. This demonstrates that the site has potential to facilitate multi modal sustainable travel.
- 4.4.8 Trains passing through Clitheroe Rail Station provide regular services to local destinations including Blackburn, Bolton and Manchester Victoria. There are also regular rail services through connecting trains to regional destinations including Manchester, Liverpool and Birmingham.

4.5 Accessibility Summary

- 4.5.1 The site is located just 1km north of the northern boundary of Clitheroe town centre thereby providing easy access to local amenities and services by foot.
- 4.5.2 The site is well located in the context of surrounding land uses and has various employment, educational and community facilities, retail, and leisure facilities all located within reasonable walking and cycling distance.
- 4.5.3 The proposed development site is very close to bus stops that provide regular bus services to Clitheroe town centre, Whalley, Preston, Burnley and a number of other areas in the vicinity of the site. These services provide the opportunity for future residents of the proposed development to travel by public transport for a number of trip purposes.
- 4.5.4 Accordingly, based on the above it is therefore evident that the site is very accessible by sustainable travel modes in compliance with NPPF and local policy.



5. Development Proposals

5.1 Introduction

5.1.1 This section describes the development proposals and the vehicular access strategy.

5.2 Proposed Development

5.2.1 The proposed development site is located approximately 1.5km north east of Clitheroe town centre as shown on **Plan 2**.

5.2.2 The development proposals are for the provision of 50 dwellings with access being provided from the A671 Chatburn Road via an existing formed access point which is currently barriered which will be upgraded as part of the development proposals.

5.2.3 A copy of an illustrative site masterplan is attached in **Appendix C**.

5.2.4 Direct access to individual dwellings will be provided from roads within the site which will contribute to a reduced speed environment since circulating drivers will need to be aware of driveway turning movements.

5.2.5 Where cul-de-sacs are provided, these will be of an appropriate length to satisfy bin carry distance requirements as set out in Manual for Streets (MfS). Turning heads of appropriate geometry to accommodate service vehicle manoeuvring will be provided on each cul-de-sac.

5.3 Access Strategy

5.3.1 Vehicular access to the proposed development is to be provided from the A671 Chatburn Road via an existing formed access point, which is currently barriered, which will be upgraded as part of the development proposals.

5.3.2 The proposed site access junction will be designed in accordance with Manual for Streets. A drawing showing a proposed site access junction, **drawing number A094939-P002** is attached in **Appendix C**. The drawing shows a site access road 5.5m wide with a 2m footway provided on the



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western side of the access road which will connect to the existing footway along the A571 Chatburn Road.

- 5.3.3 The visibility splays achieved at the junction are in excess of that required to cater for the 85th percentile speeds (41.1mph for eastbound and 39.3mph for westbound) observed in the ATC speed surveys undertaken in 2015 (visibility to right 2.4m x 61.0m and visibility to left 2.4 x 65.5m).
- 5.3.4 Three further pedestrian connections from the site to the A571 Chatburn Road are provided via footpaths which are located approximately 24m, 55m and 97m from the site access junction.



6. Traffic Flow Analysis

6.1 Introduction

6.1.1 This section of the report explains the methodology that has been used to determine the future traffic flows used to assess the traffic impact of the proposals on the local highway network.

6.2 Background Traffic Flows

6.2.1 As described in **Section 3.4** above, an ATC survey was commissioned in November 2015 on the A671 Chatburn Road in the vicinity of the site from which traffic flows along the road were obtained. In addition, MCJC were commissioned at the following junctions.

- A671 Chatburn Road / Clitheroe Hospital Site Access T-junction
- A671 Pimlico Link Road / A671 Chatburn Road Roundabout
- Deanfield / A671 Pimlico Link Road T-junction
- Lincoln Way / A671 Pimlico Link Road T-junction

6.2.2 From the surveys, the peak hour traffic flows were found to be as follows:

- AM peak hour between 08:00 to 09:00
- PM peak hour between 15:45 to 16:45.

6.2.3 The 2015 observed traffic flows for the AM and PM peak hour are shown in **Figures 1 to 2**.

6.3 Assessment Years and Background Traffic Growth

6.3.1 The assessment years used in the subsequent junction capacity assessments are as follows:

- Assessment year 1 - 2016 (application year)
- Assessment year 2 i- 2021 (5 years following submission of the planning application)

6.3.2 The observed traffic flows have been growthed up to the assessment years using TEMPRO V7.0 local growth factors for Ribble Valley 002 mid-layer super output area. TEMPRO is a program that reports on the National Trip End Model, a tool that is used to estimate future trip productions of geographical areas that occur from such factors such as changes in population, households and



employment. A summary of the resulting growth factors is presented in **Table 6.1** and the full TEMPRO outputs are included in **Appendix D**.

Table 6.1: Summary of Traffic Growth Factors

Survey Year	Assessment Year	Growth Factor	
		AM Peak Period	PM Peak Period
2015	2016	1.0128	1.0138
2015	2021	1.0768	1.0777

6.3.3 The 2015 surveyed traffic flows shown in **Figures 1** and **2** have been factored to the assessment years by applying the TEMPRO factors shown in **Table 6.1**. The resulting 2016 and 2021 weekday AM and PM peak hour background traffic flows are shown in **Figures 3** to **6**.

6.4 Vehicular Trip Generation of the Proposed Development

6.4.1 To forecast the potential level of development traffic that the residential use may generate in the future, the traffic generation database TRICS has been interrogated. The database contains the survey results from a large number of land uses which by the selection of appropriate parameters enables robust forecasts of traffic generation to be provided.

6.4.2 The residential site selection parameters used in forecasting the potential level of development traffic were based upon the following parameters:

- 'Houses Privately Owned' sub-category of residential land uses
- Sites in Greater London, Ireland and Northern Ireland excluded
- Only sites between 20 and 100 residential dwellings included
- Weekday surveys only
- Sites in a town centre and edge of town centre were excluded
- Sites with car ownership of 1.1-1.5 included, (based on 2011 census data which shows that car ownership in Clitheroe is 1.17).

6.4.3 The assessment of traffic impacts for the development has been undertaken for weekday AM and PM peak hours. It is considered that these are the periods when travel demand on the local highway network is at its highest and junction assessments during these periods show a possible worst case scenario.



6.4.4 Trip rates and the resulting traffic generation based on a total of 52 residential units are summarised in **Table 6.2**. The full TRICS outputs are presented in **Appendix E**.

Table 6.2 – Residential Traffic Generation (52 Dwellings)

Residential Use (52 Units)	AM Peak Hour (0800 – 0900)		PM Peak Hour (1700 – 1800)	
	Arrivals	Departures	Arrivals	Departures
Trip Rate per Unit	0.155	0.409	0.380	0.170
Vehicle Trips	8	21	20	9
Total	29		29	

6.4.5 **Table 6.2** shows that the development proposals are only estimated to generate around 29 two-way vehicular traffic movements during both the weekday AM and PM peak hours. This equates to less than one vehicles every two minutes.

6.5 Trip Distribution

6.5.1 The commuting patterns of future residents of the proposed development are expected to be similar to the patterns of existing residents of the Ribble Valley 002 local area and therefore trips generated by the development proposals have been distributed on to the wider surrounding highway network using the 2011 'journey to work' census statistics. Data relating to the derivation of the trip distribution is contained in **Appendix F**.

6.5.2 Based on 2011 Census statistics, it is anticipated that traffic generated by the proposed development will arrive and depart using the following distribution:

- Chatburn Road NB 5.7%
- Pimlico Link Road EB 42.6%
- A671 SB 46.8%
- Pimlico Link Road WB 4.9%

6.5.3 The trip distribution based on 2011 census statistics is detailed in **Figure 7**.



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6.5.4 **Figures 8** and **Figure 9** show the estimated development traffic distributed across the local highway network during the weekday AM and PM peak hours respectively.

6.6 Assessment Traffic Flows

6.6.1 **Figures 10** to **Figure 13** show the 2016 and 2021 Assessment Flows in the weekday AM and PM peak hours respectively. These flows have been derived by adding the estimated development traffic flows (**Figures 8** and **9**) to the 2016 and 2021 growthed survey flows (**Figure 3** to **6**).



7. Traffic Impact Assessment

7.1 Traffic Impact Percentage

- 7.1.1 As described in **Section 6.4**, the estimated trip generation of the proposed development is minimal and equivalent to approximately just one vehicle every two minutes.
- 7.1.2 The percentage traffic impact of the proposed development on the local highway network is shown in **Figures 14 to 17** for the assessment years 2016 and 2021 during the weekday AM and PM peak hours respectively.
- 7.1.3 **Figures 14 to 17** show that even in 2016, the highest increase in traffic that the development is expected to result in at a junction included within the study area is just two percent (at the Pimlico Link Road/Deanfield Way junction).
- 7.1.4 This level of increase in traffic is not considered to be significant, let alone severe in NPPF terms and therefore detailed capacity assessment for the off-site junctions listed in **Section 6.2** are not considered necessary.
- 7.1.5 However, to show that the proposed site access junction can accommodate the level of traffic that the proposed development is expected to generate, the following section sets out the results of junction capacity assessments undertaken at the site access junction.

7.2 Proposed Site Access Junction Capacity Assessments

- 7.2.1 The proposed site access priority junction has been assessed using PICADY software. Full PICADY modelling outputs for this junction are contained in **Appendix G**. A summary of the 2016 and 2021 traffic impact assessment results are shown in **Table 7.1**.

Table Error! No text of specified style in document..2 – 2016 and 2020 Assessment of Proposed Site Access Junction

Approach	2016 Assessment Year				2026 Assessment Year			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Queue (PCU)	Max RFC	Queue (PCU)	Max RFC	Queue (PCU)	Max RFC	Queue (PCU)
Site Access	0.060	0	0.020	0	0.060	0	0.020	0
Chatburn Road (W)	0.010	0	0.020	0	0.010	0	0.020	0



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7.2.2 **Table 7.1** shows that the proposed access junction can more than accommodate the level of traffic likely to be generated by the proposed development and that the junction will operate with significant spare capacity in the future.



8. Conclusions

8.1.1 WYG has been appointed to prepare a transport assessment to support proposals for a residential development located on the north-eastern edge of Clitheroe, Lancashire. The development proposals comprise of 50 residential dwellings with associated roads, parking and landscaping.

8.1.2 A summary of the report is provided below.

- Relevant national and local planning policy has been reviewed with regard to transport considerations for the development. The development is compliant with the intentions of the various planning policies.
- The site is located just 1km north of the northern boundary of Clitheroe town centre thereby providing easy access to local amenities and services by foot.
- The site is well located in the context of surrounding land uses and has various employment, educational and community facilities, retail, and leisure facilities all located within reasonable walking and cycling distance.
- The proposed development site is very close to bus stops that provide regular bus services to Clitheroe town centre, Whalley, Preston, Sawley and a number of other areas in the vicinity of the site. These services provide the opportunity for future residents of the proposed development to travel by public transport for a number of trip purposes.
- The proposals are forecast to generate only 29 two-way trips during the weekday morning and evening peak hours, which is equivalent to only one additional vehicle every two minutes. Even in 2016, the highest increase in traffic that the development is expected to result in at a junction included within the study area is just two percent which is not considered to be significant, let alone severe in NPPF terms.
- Junction capacity assessments undertaken at the proposed site access junction show that the proposed junction can more than accommodate the estimated level of traffic that will be generated by the proposals.

8.1.3 Given the above, it is evident that the site is accessible by sustainable modes of transport thereby supporting the principles of NPPF.



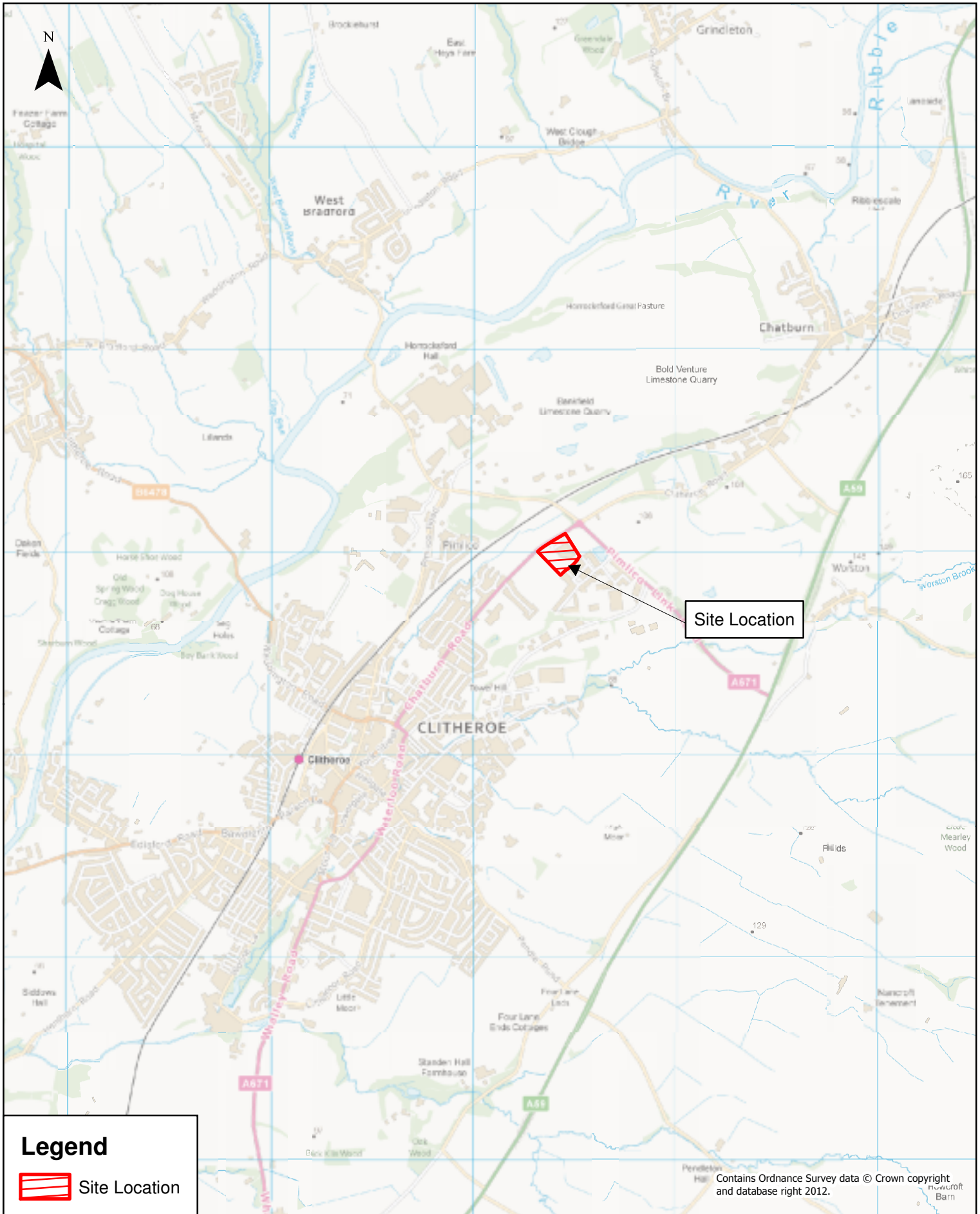
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- 8.1.4 It is also evident that the proposed development would not have any significant traffic impacts, let alone the impacts being 'severe' and is in compliant with paragraph 32 of the NPPF.
- 8.1.5 In conclusion there are no transport related issues to why the development should not be granted planning permission.

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Plans



Legend

 Site Location

Land South of Chatburn Road, Clitheroe

Plan 1: Site Location

Scale @ A4 NTS

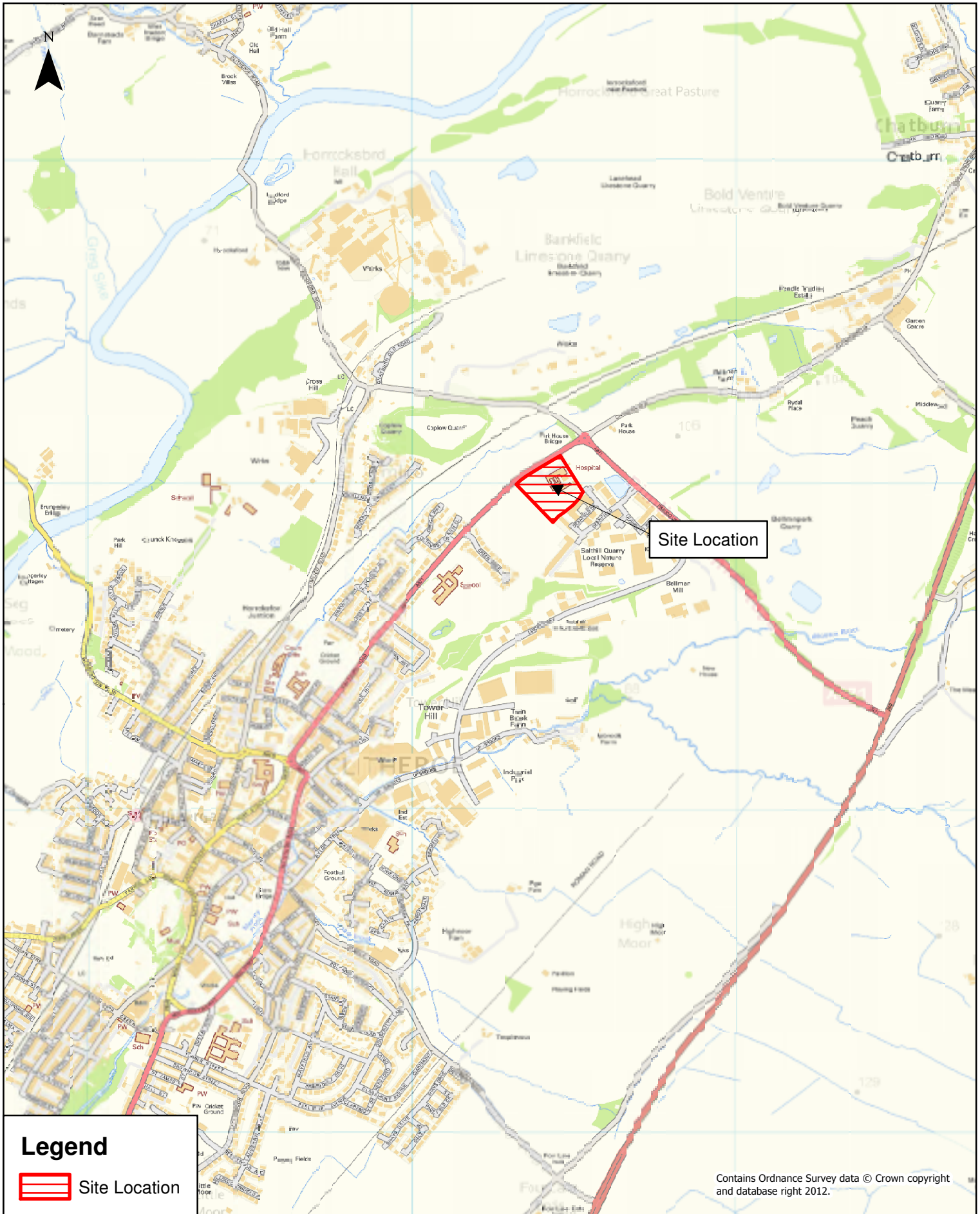
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Legend

 Site Location

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Land South of Chatburn Road, Clitheroe

Plan 2: Local Highway Network

Scale @ A4 NTS

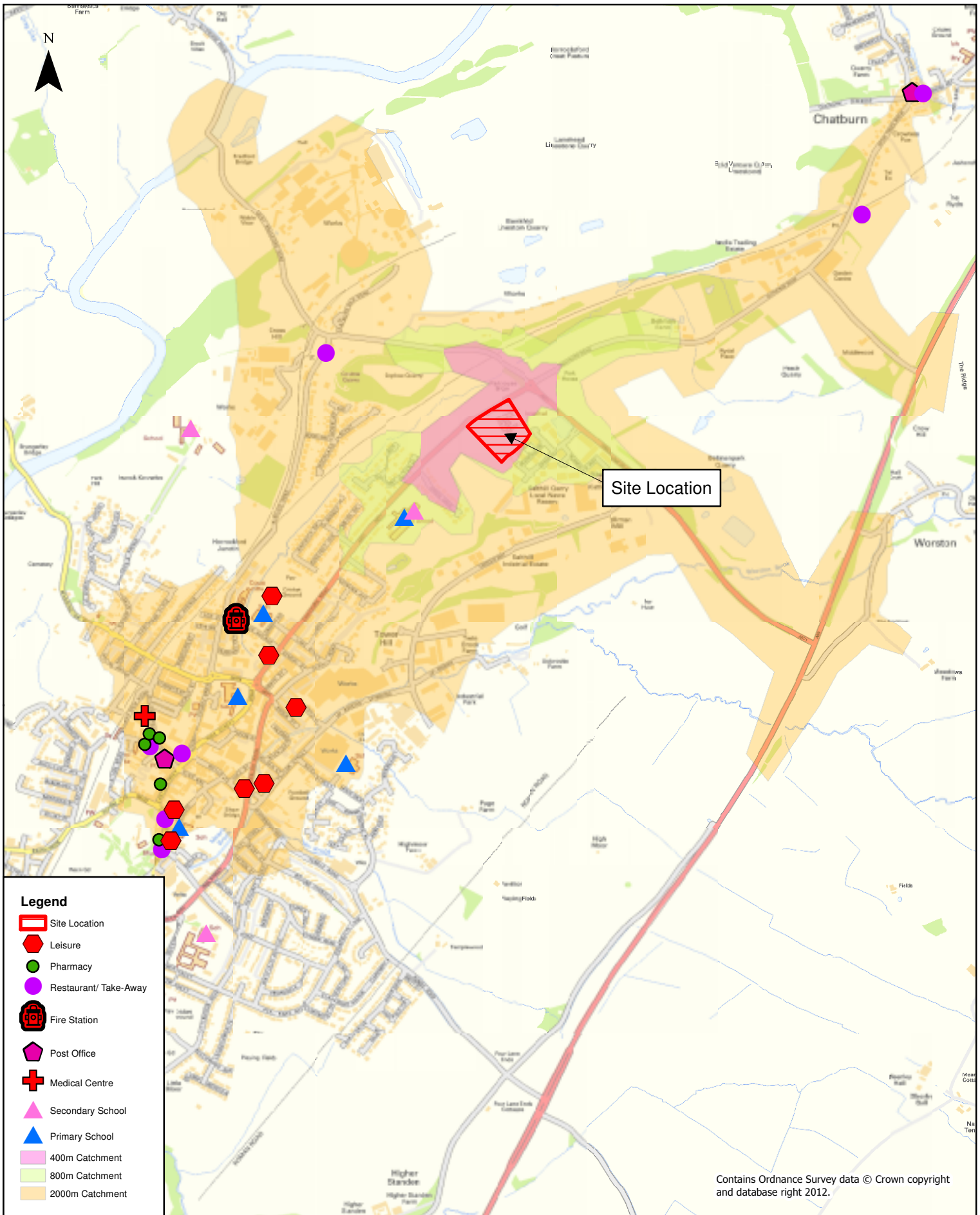
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Plan 3: 400m, 800m, 2000m Walking Catchment

Scale @ A4 NTS

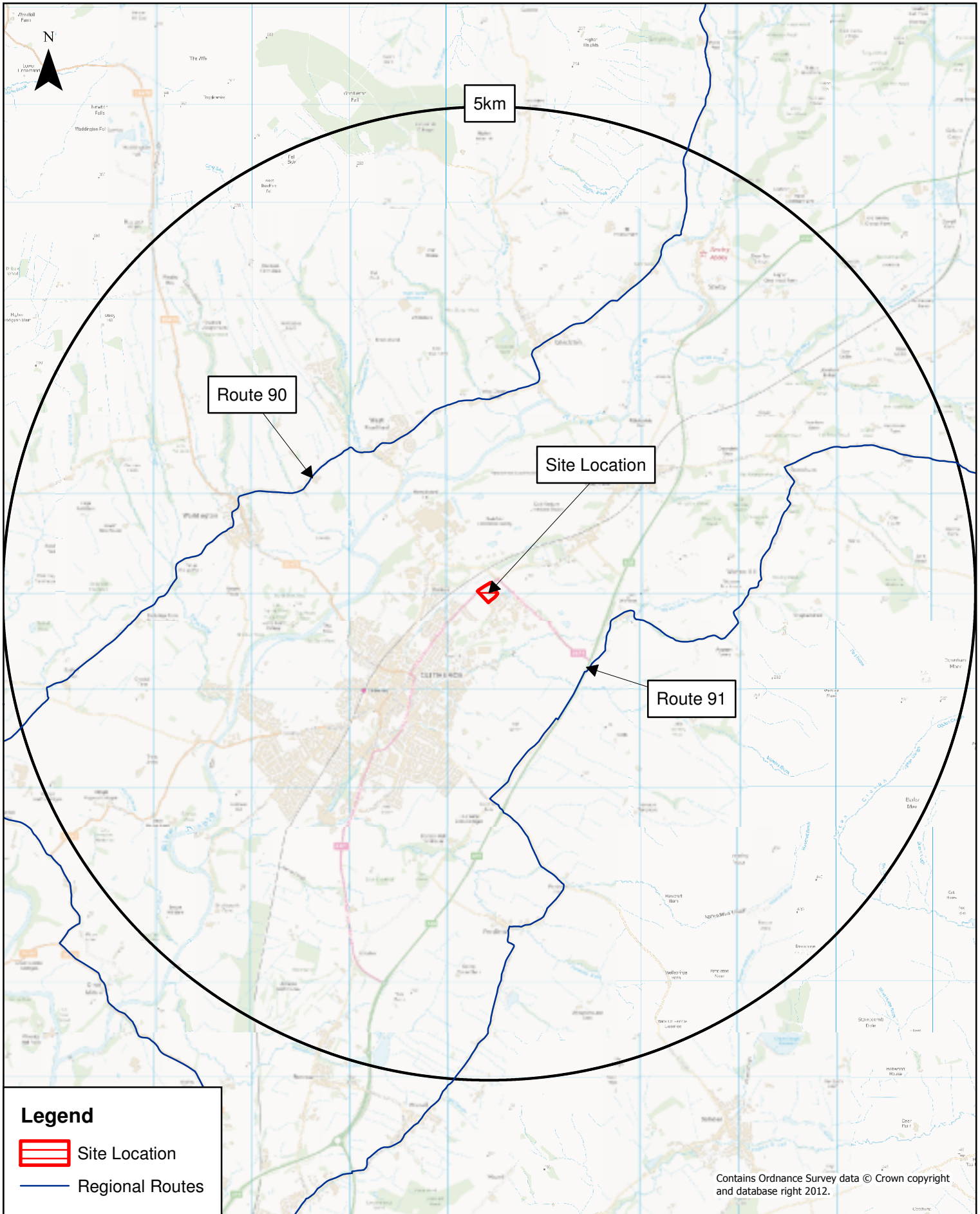
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Legend

-  Site Location
-  Regional Routes

Land South of Chatburn Road, Clitheroe

Plan 4: 5km Cycling Catchment

Scale @ A4 NTS

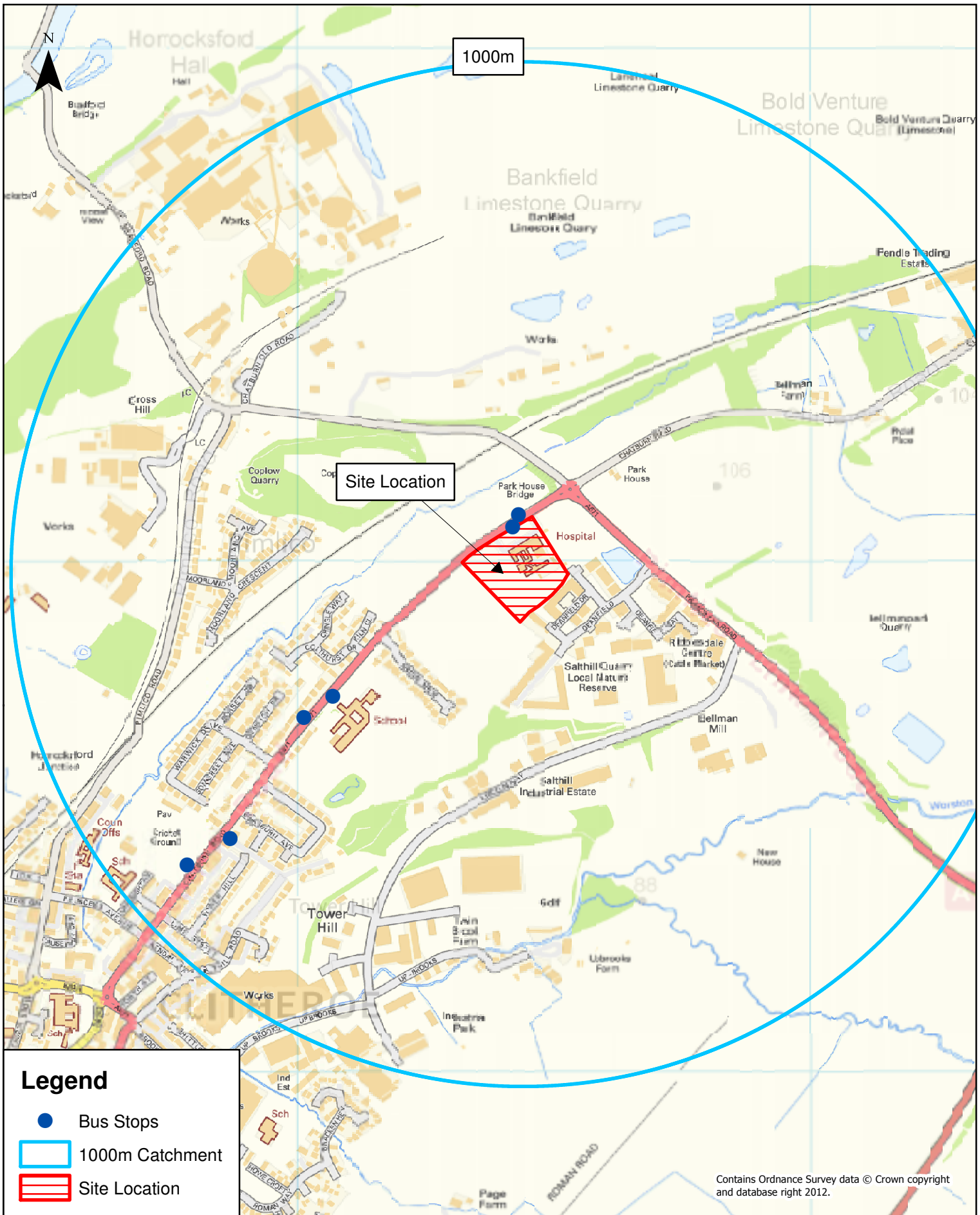
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Land South of Chatburn Road, Clitheroe

Plan 5: Bus Stops within 1000m catchment

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Figures

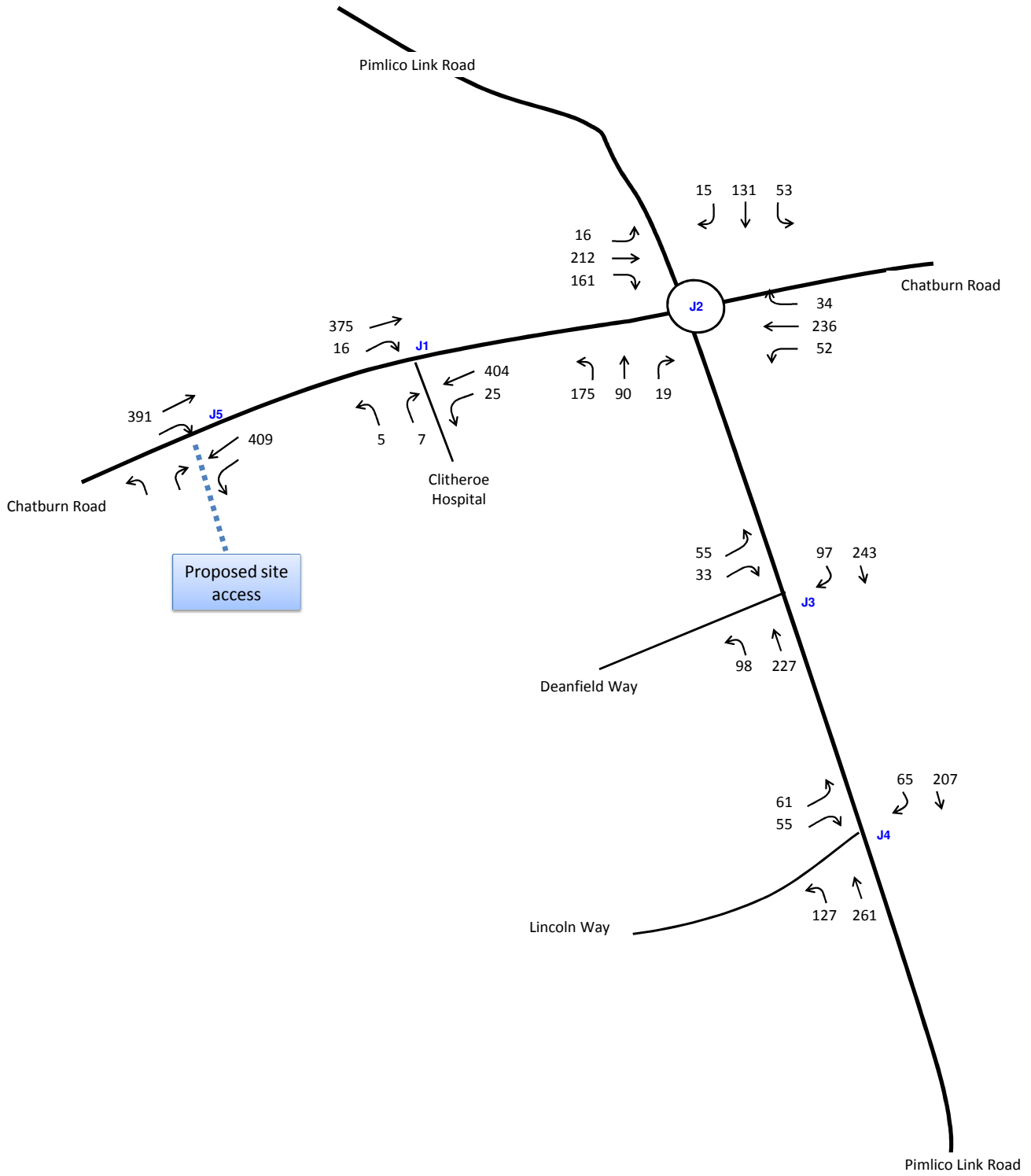


Figure 1: AM Peak Hour 2015 Surveyed Flows (0800-0900)

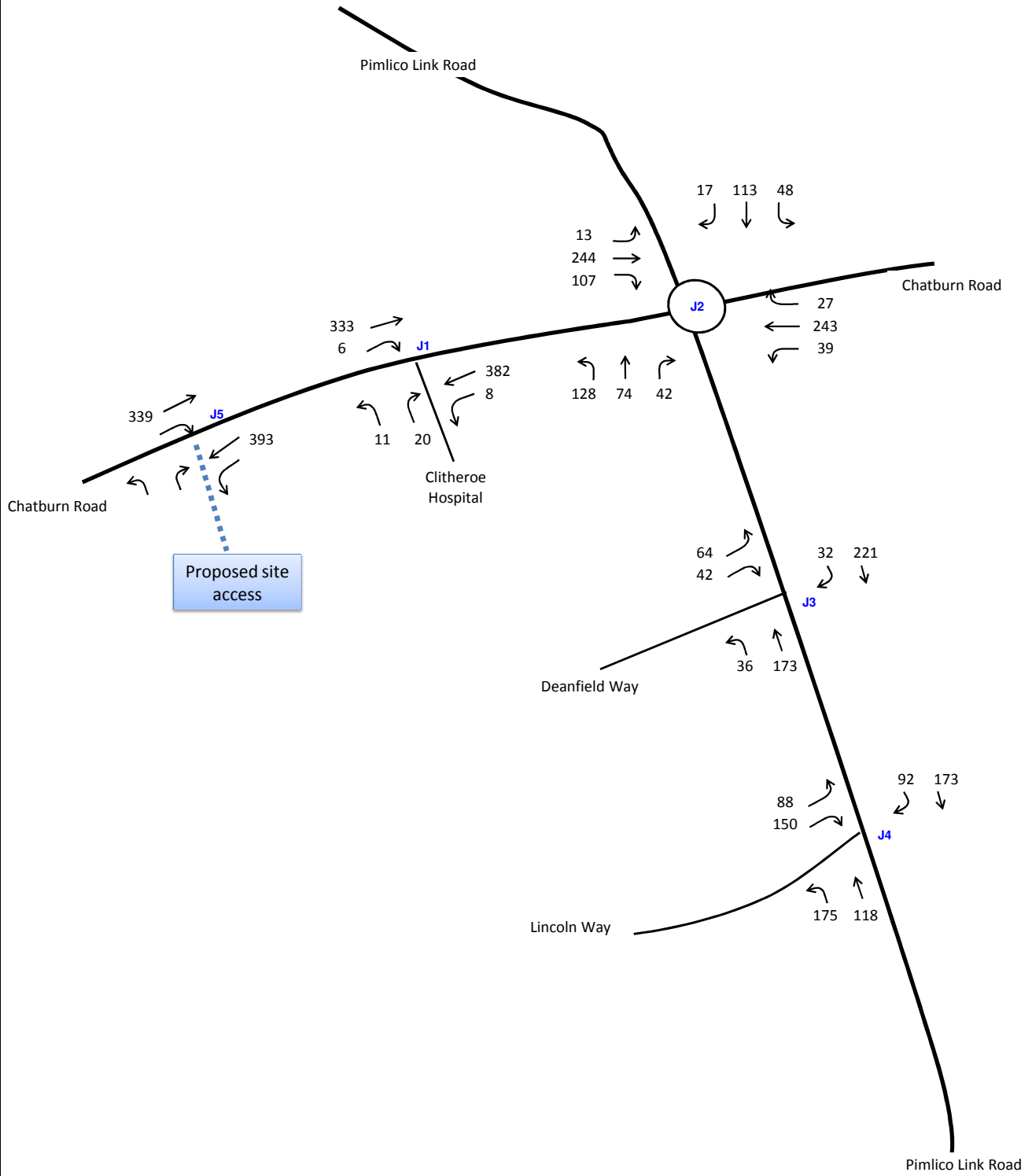


Figure 2: PM Peak Hour 2015 Surveyed Flows (1545-1645)

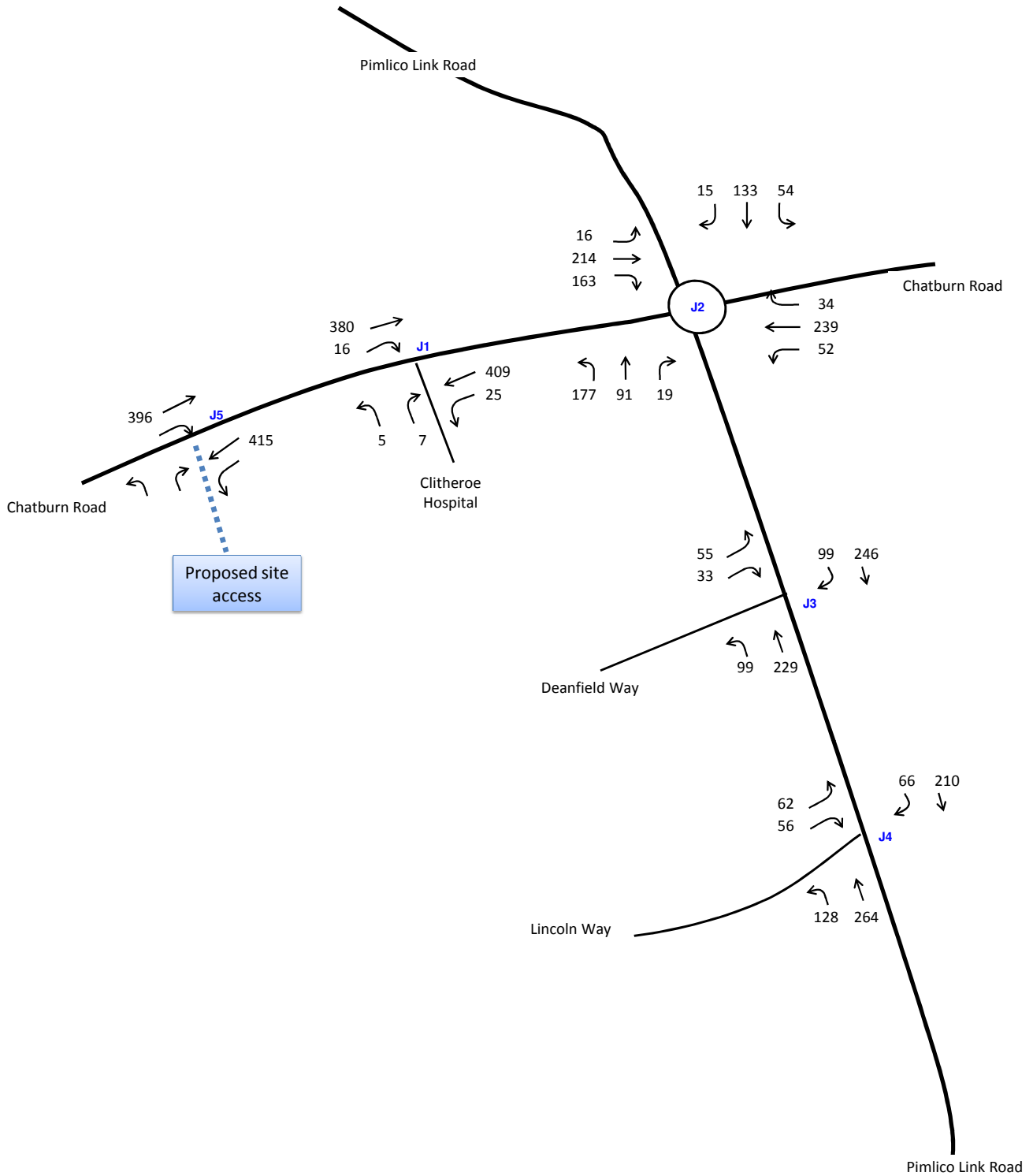


Figure 3: AM Peak Hour 2016 Growthed Surveyed Flows (0800-0900)

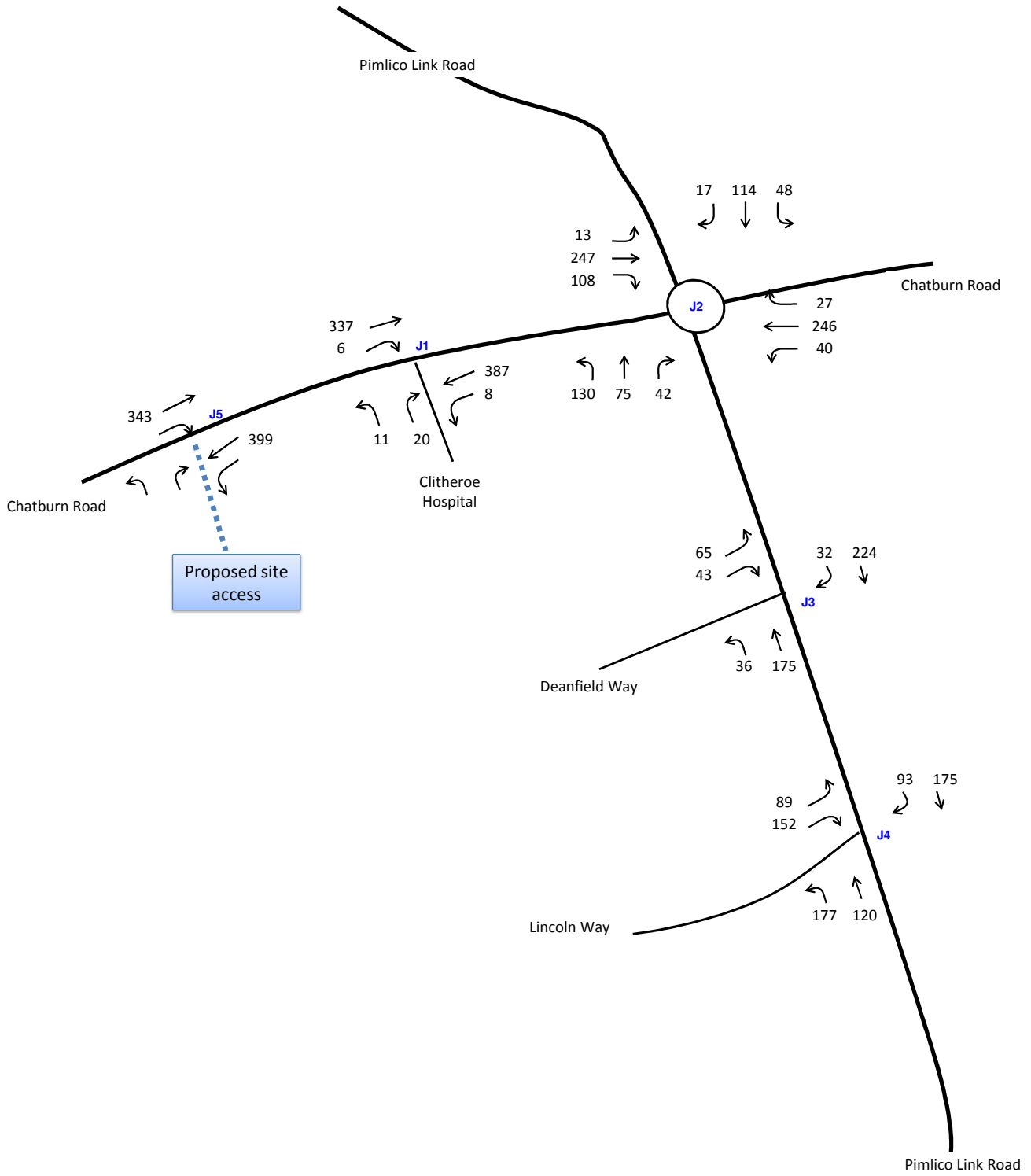


Figure 4: PM Peak Hour 2016 Growthed Surveyed Flows (1545-1645)

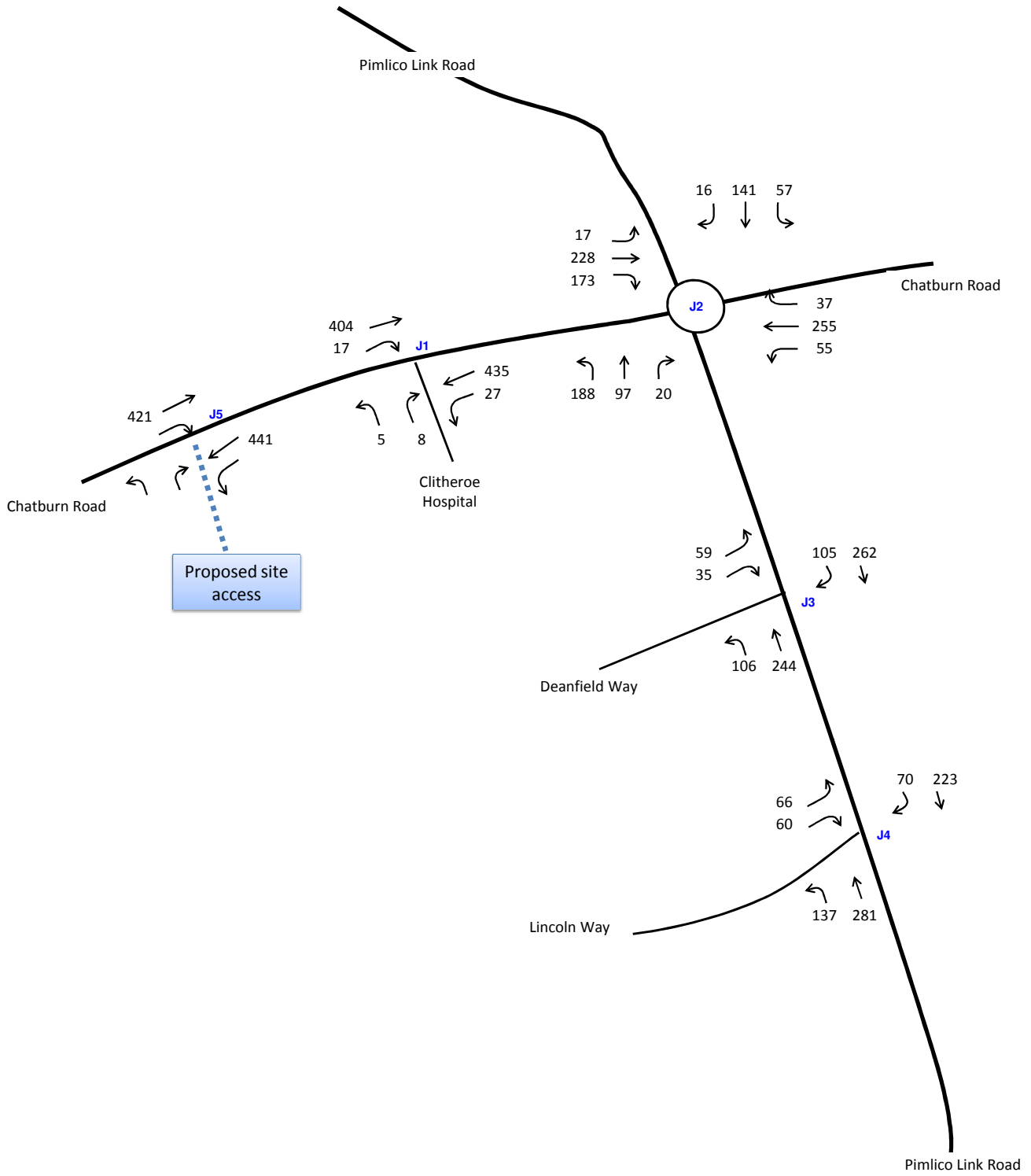


Figure 5: AM Peak Hour 2021 Growthed Surveyed Flows (0800-0900)

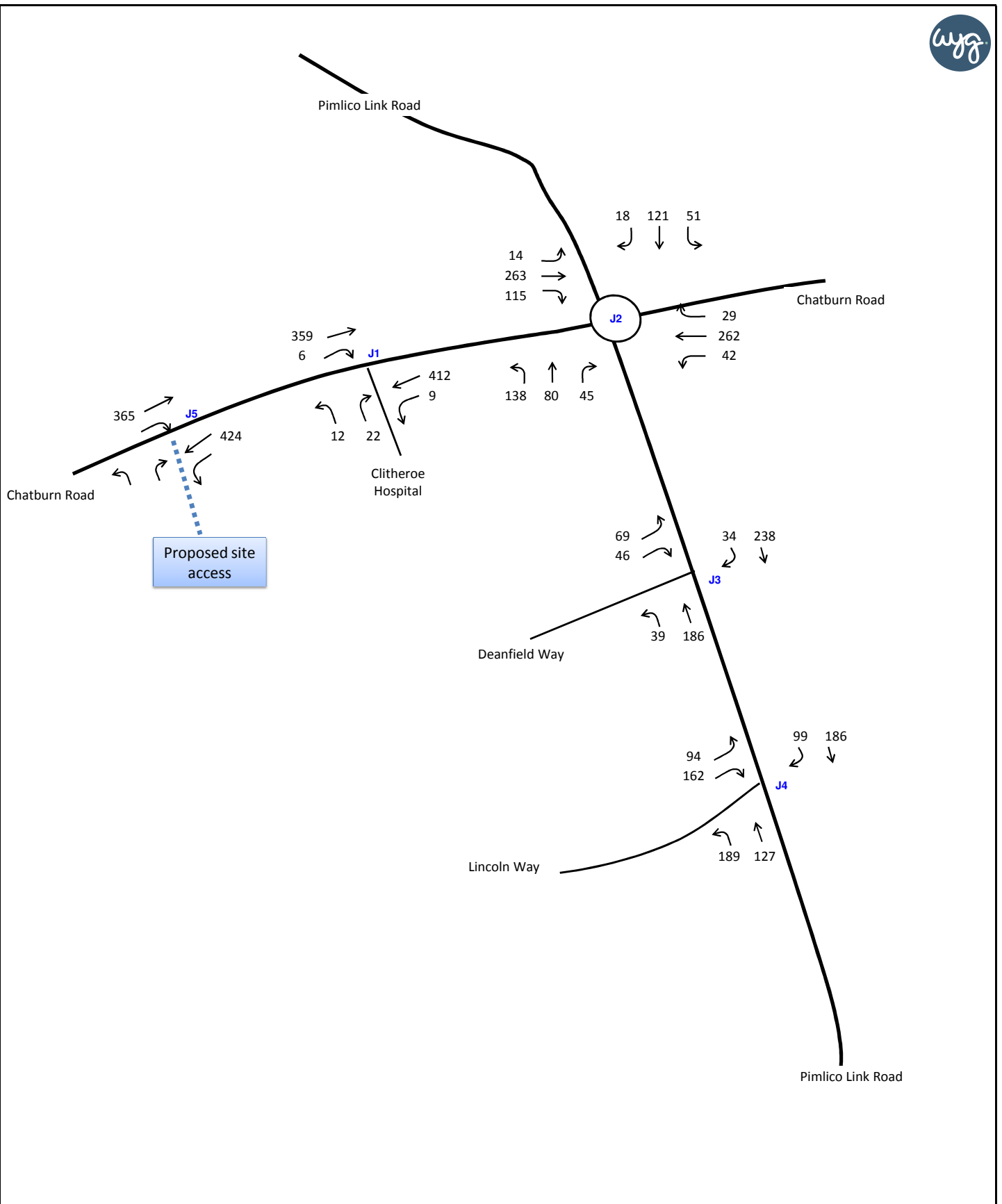


Figure 6: PM Peak Hour 2021 Growthed Surveyed Flows (1545-1645)

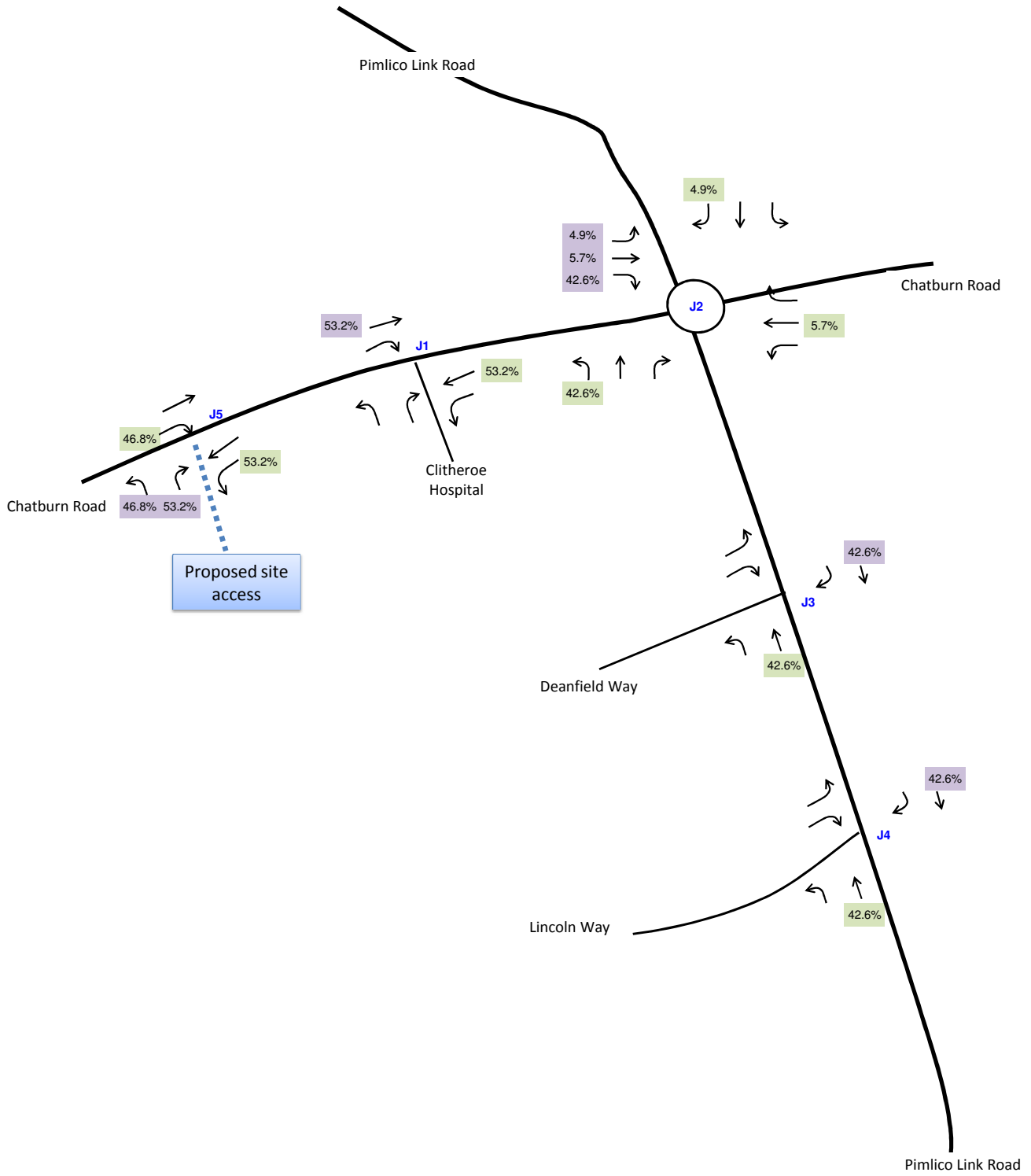


Figure 7: Trip Distribution

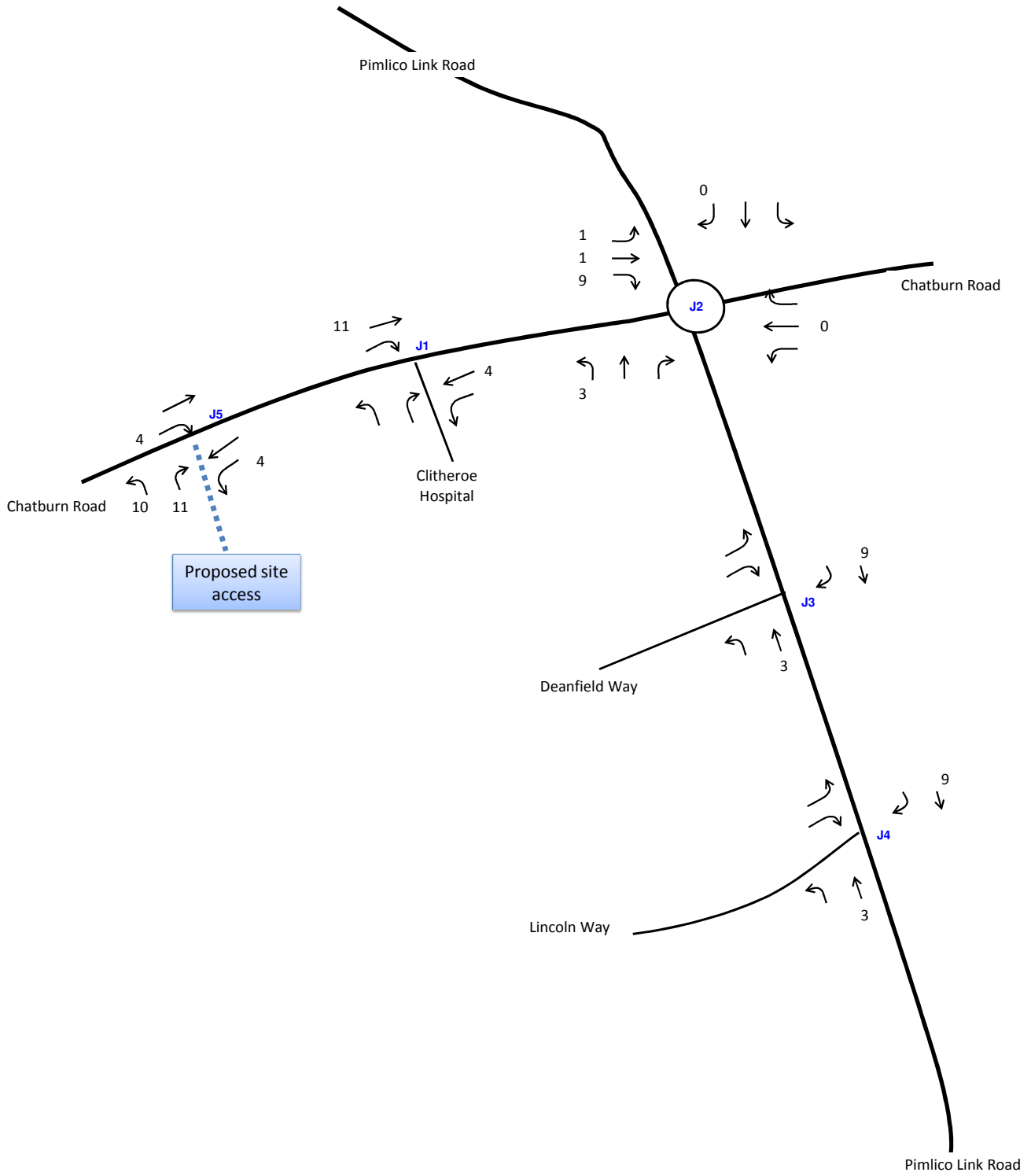


Figure 8: AM Peak Trip Generation (52 Dwellings)

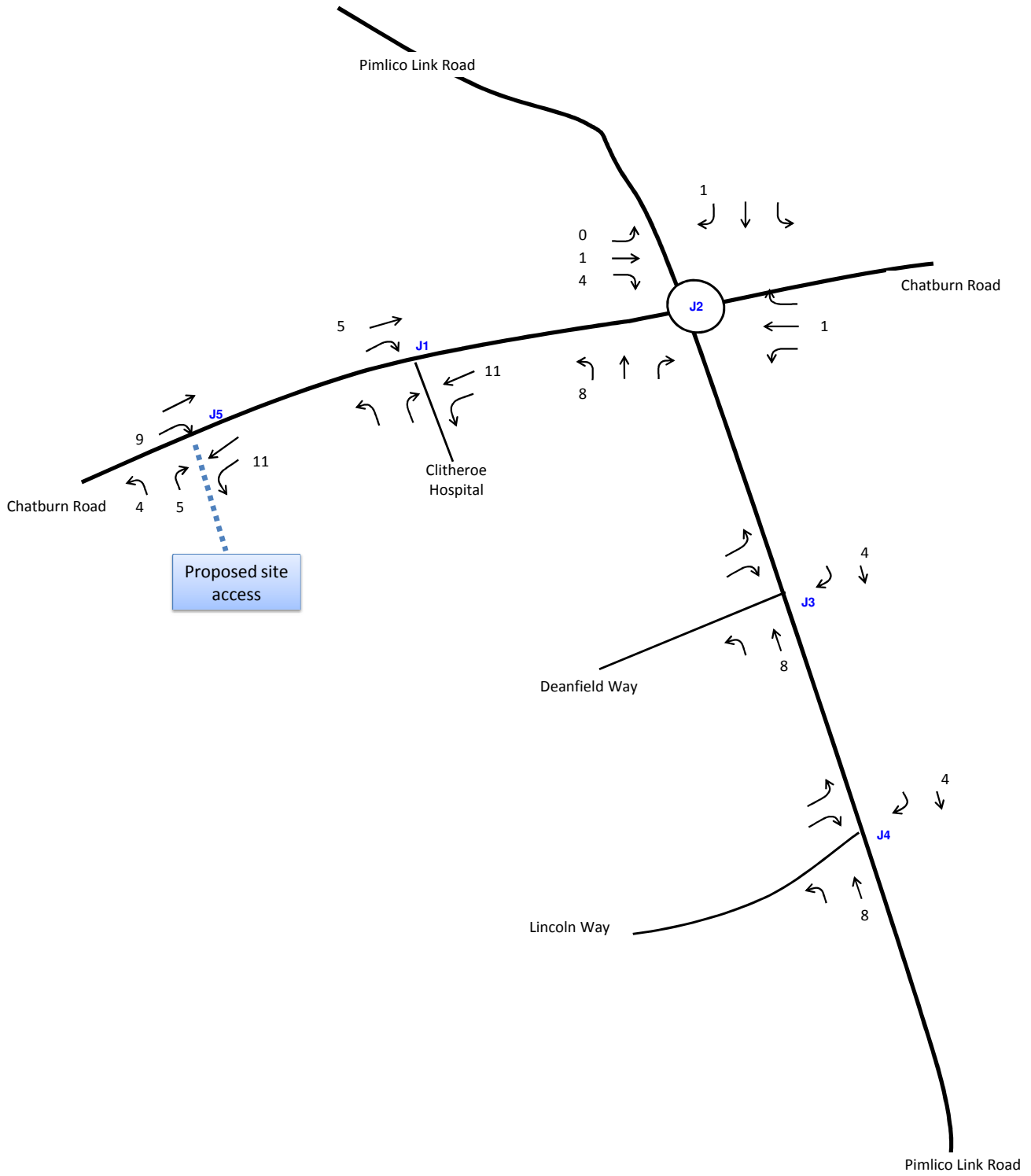


Figure 9: PM Peak Trip Generation (52 Dwellings)

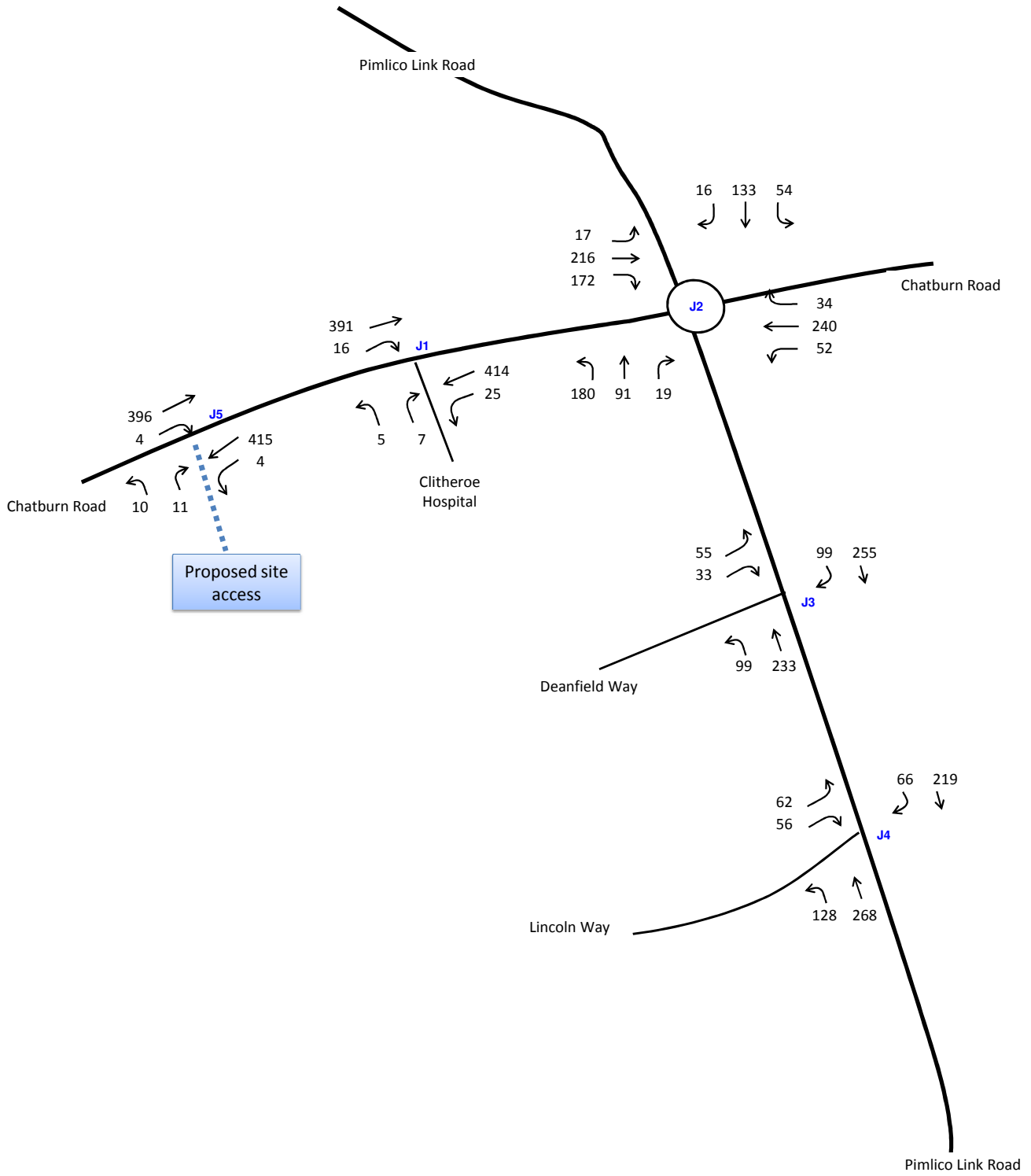


Figure 10: AM Peak Hour 2016 Assessment Flows

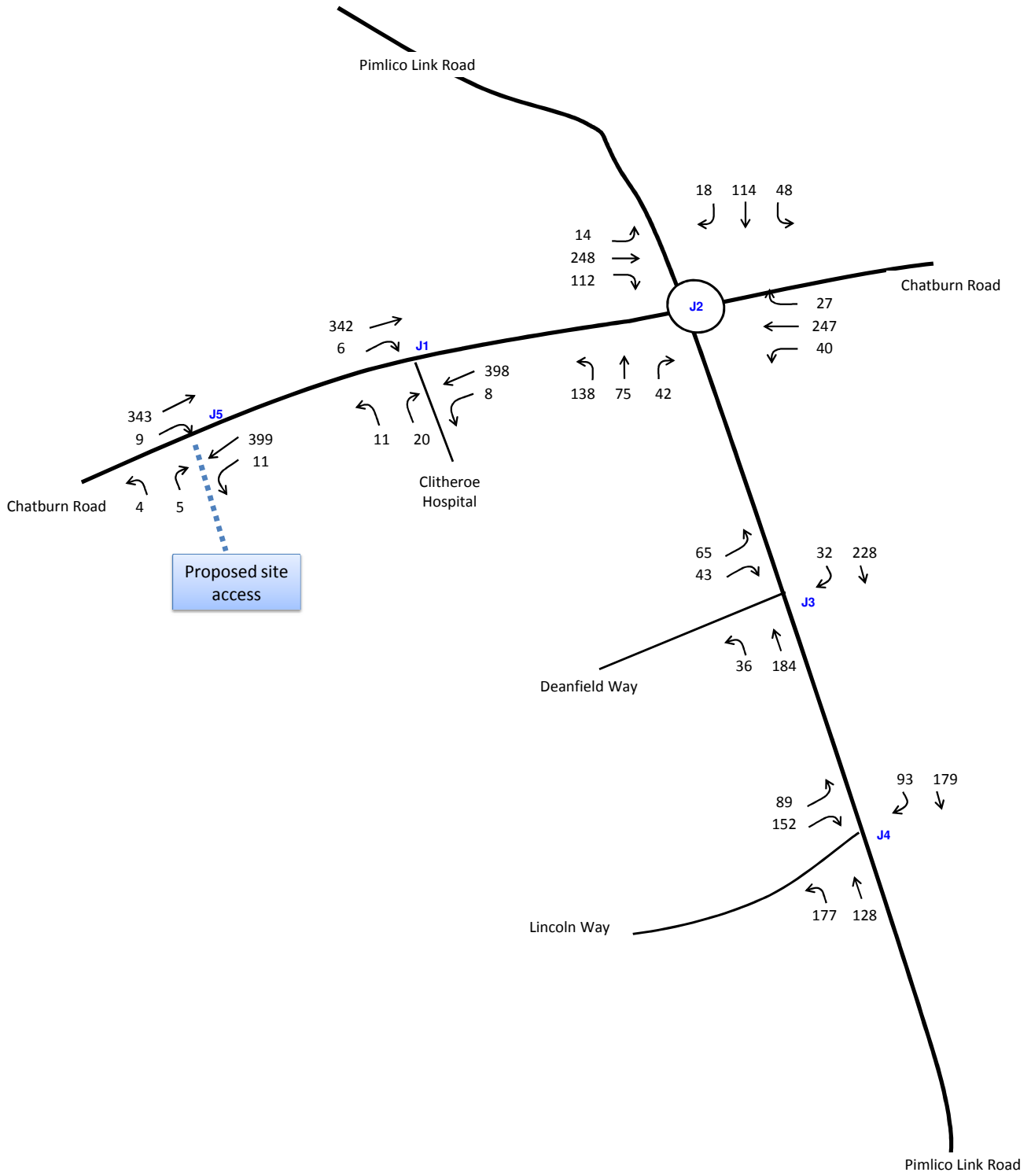


Figure 11: PM Peak Hour 2016 Assessment Flows

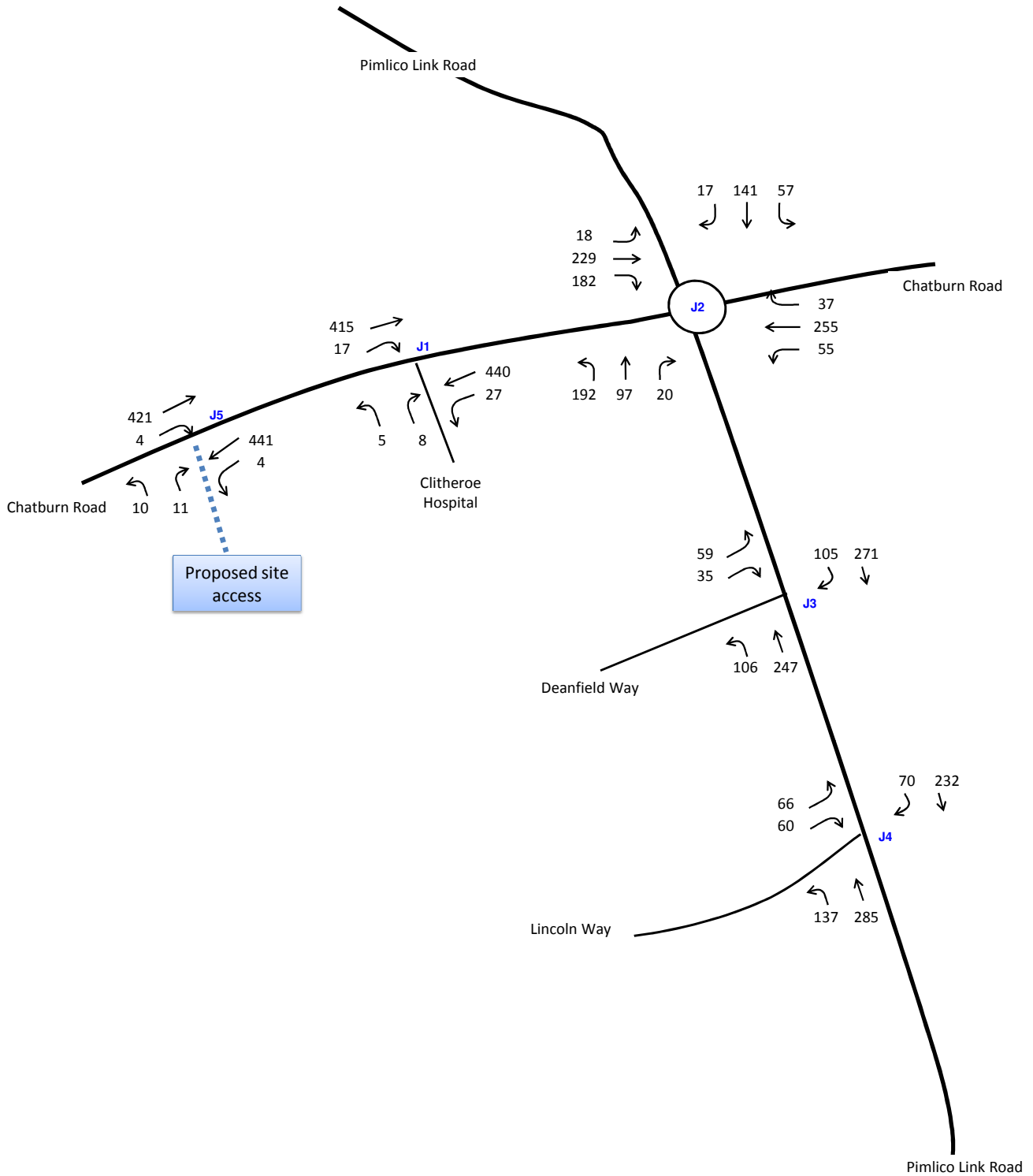


Figure 12: AM Peak Hour 2021 Assessment Flows

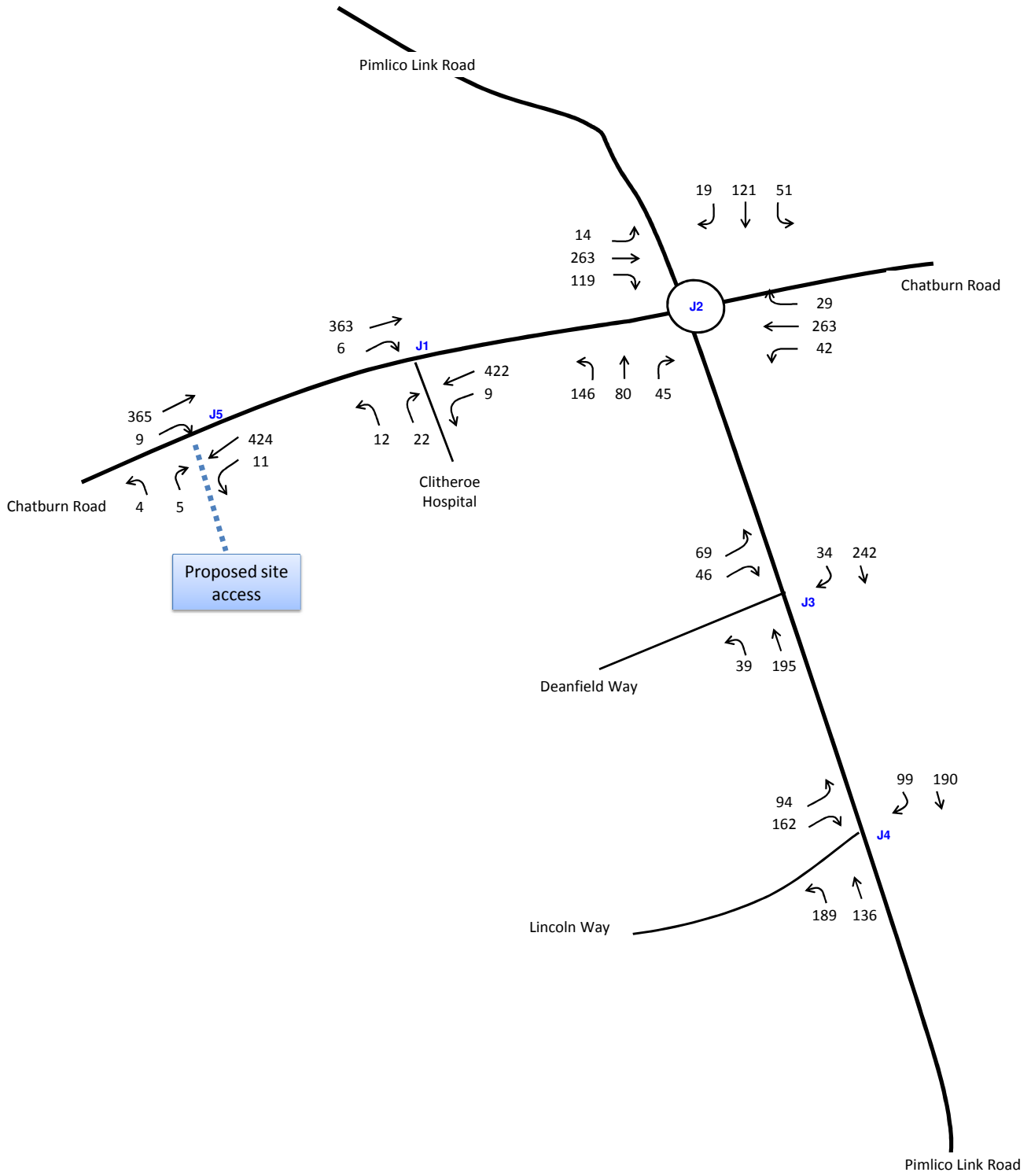


Figure 13: PM Peak Hour 2021 Assessment Flows

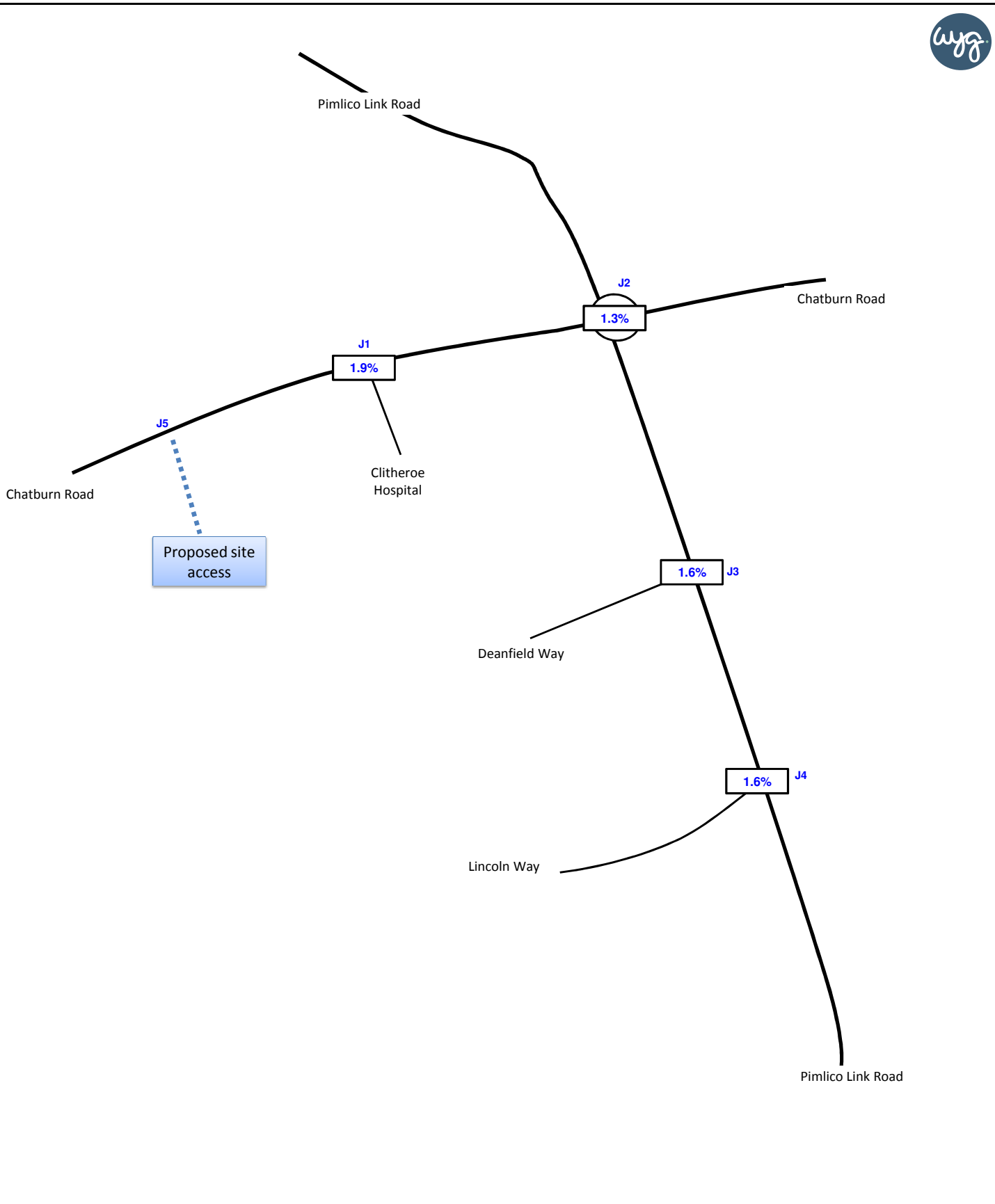


Figure 14: AM Peak Hour 2016 Traffic Impact (%)

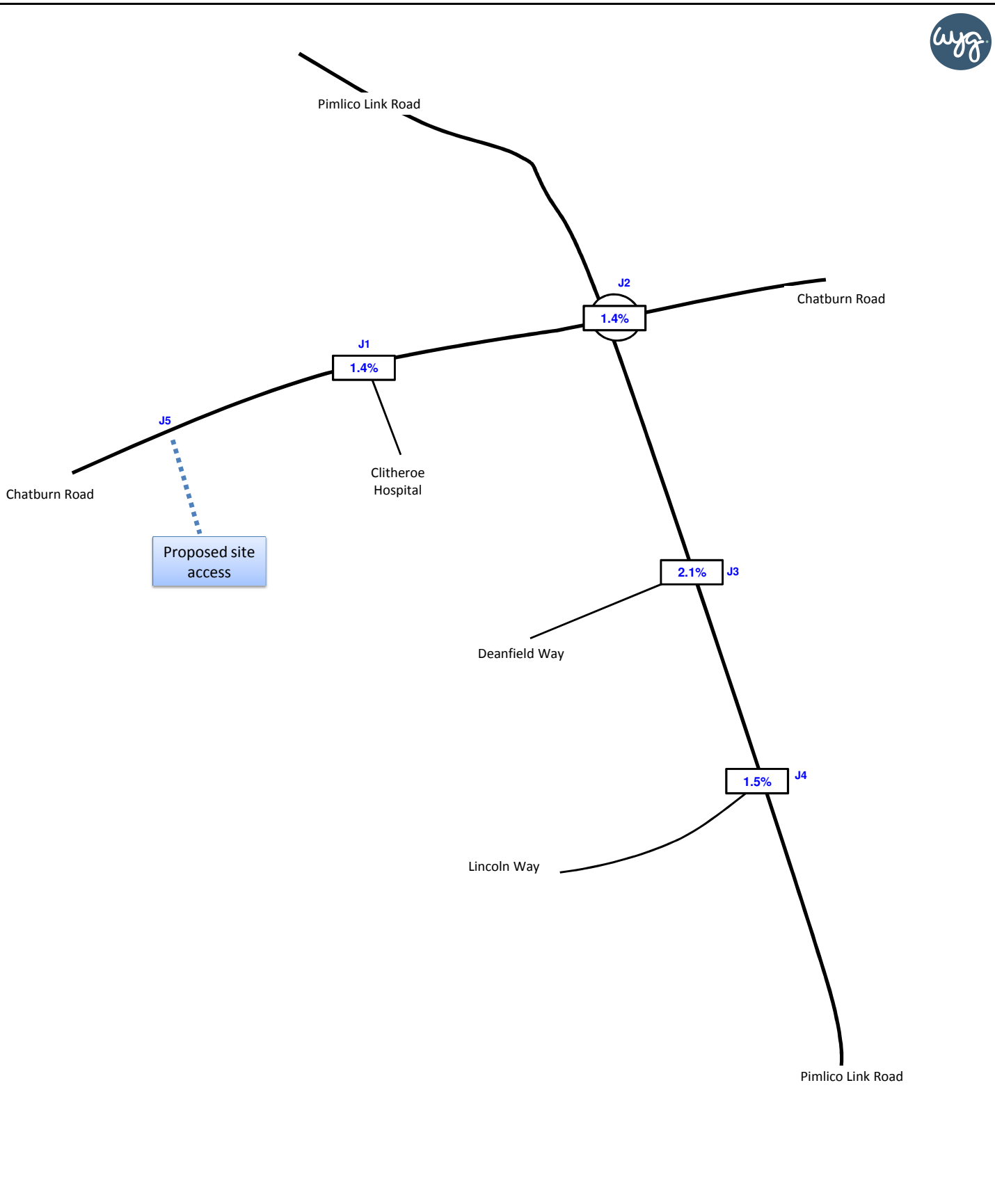


Figure 15: PM Peak Hour 2016 Traffic Impact (%)

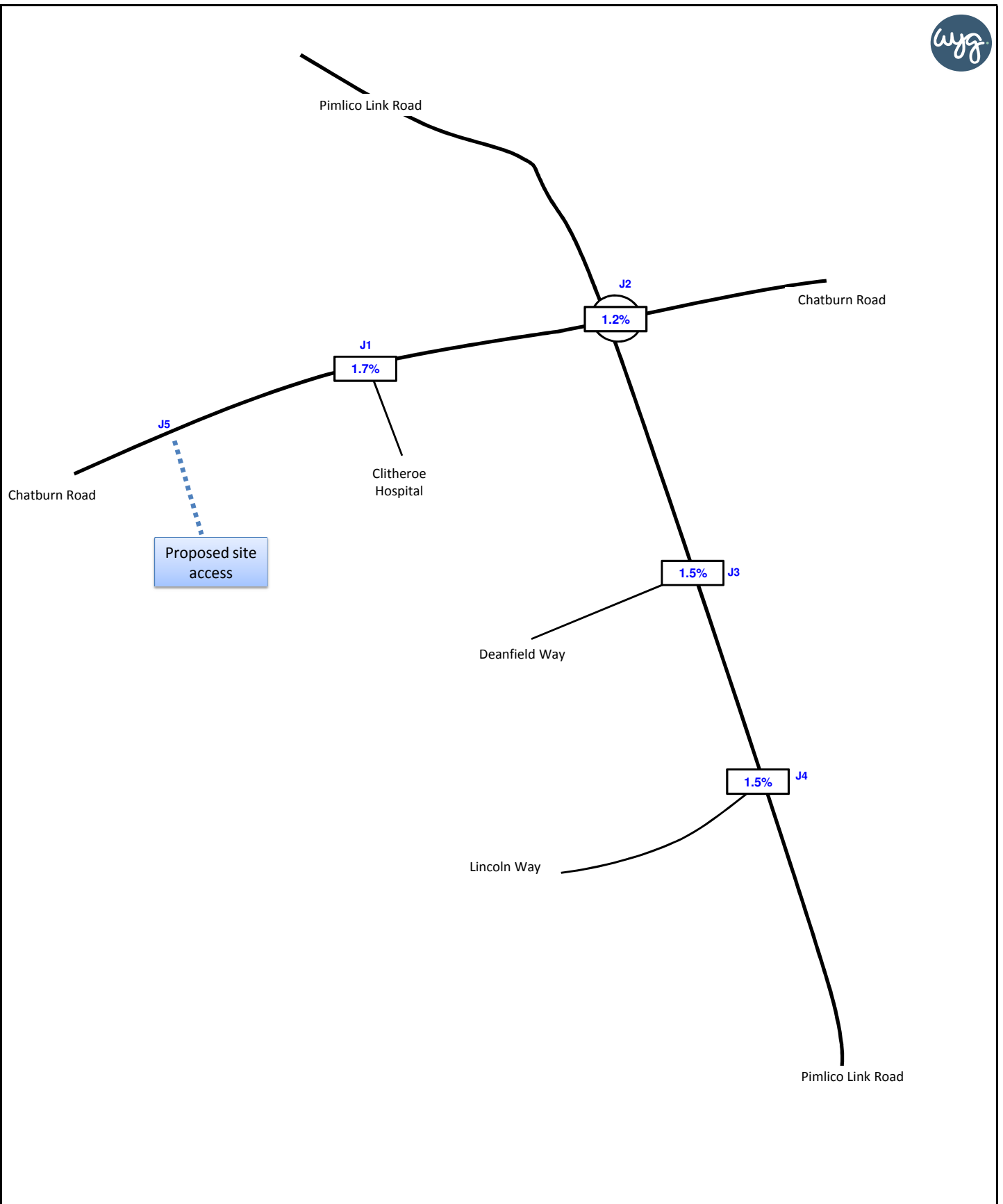


Figure 16: AM Peak Hour 2021 Traffic Impact (%)

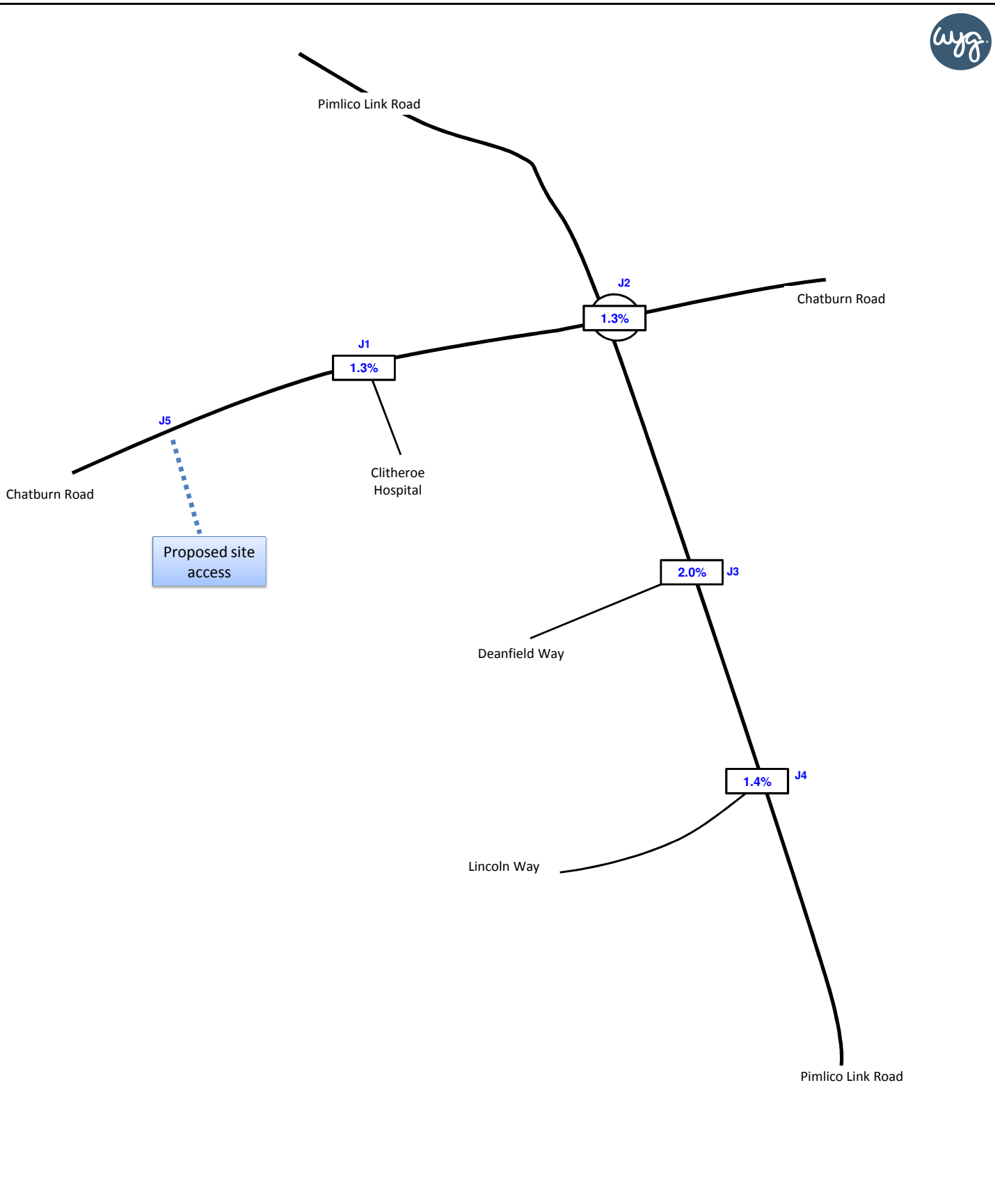


Figure 17: PM Peak Hour 2021 Traffic Impact (%)