Shropshire Council: Shropshire Local Plan

Representation Form

*Please complete a separate **Part B Representation Form** (this part) for each representation that you would like to make. One **Part A Representation Form** must be enclosed with your **Part B Representation Form(s).***

*We have also published a separate **Guidance Note** to explain the terms used and to assist in making effective representations.*

Part B: Representation

Name and Organisation:	Les Stephan Planning

Q1. To which document does this representation relate?

☑ Regulation 19: Pre-Submission Draft of the Shropshire Local Plan

☐ Sustainability Appraisal of the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan

☐ Habitats Regulations Assessment of the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan

(Please tick one box)

Q2. To which part of the document does this representation relate?

Paragraph:		Policy:	DP1 S5	Site:	CST028	Policies Map:	

Q3. Do you consider the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan is:

	Yes:	No:
A. Legally compliant	☐	☐
B. Sound	☐	☑
C. Compliant with the Duty to Co-operate	☐	☐

(Please tick as appropriate).

Q4. Please give details of why you consider the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.

If you wish to support the legal compliance or soundness of the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan or its compliance with the duty to co-operate, please also use this box to set out your comments.

Please refer to attached statement and reports

(Please continue on a separate sheet if necessary)

Q5. Please set out the modification(s) you consider necessary to make the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan legally compliant and sound, in respect of any legal compliance or soundness matters you have identified at Q4 above.

Please note that non-compliance with the duty to co-operate is incapable of modification at examination. You will need to say why each modification will make the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Include the SLAA Site CST028 for a housing allocation in the LPR delivering the many public benefits it will bring.

(Please continue on a separate sheet if necessary)

Please note: *In your representation you should provide succinctly all the evidence and supporting information necessary to support your representation and your suggested modification(s). You should not assume that you will have a further opportunity to make submissions.*

After this stage, further submissions may only be made if invited by the Inspector, based on the matters and issues he or she identifies for examination.

Q6. If your representation is seeking a modification to the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan, do you consider it necessary to participate in examination hearing session(s)?

Please note that while this will provide an initial indication of your wish to participate in hearing session(s), you may be asked at a later point to confirm your request to participate.

☐ No, I do not wish to participate in hearing session(s)

☑ Yes, I wish to participate in hearing session(s)

(Please tick one box)

Q7. If you wish to participate in the hearing session(s), please outline why you consider this to be necessary:

The failure to deliver any signifcant housing over a protracted period and and little prospect of delivery in the plan period despite the acknowledgment of the need in the policy is a serious flaw in the plan which must be throughly examined. Already three public houses have closed in the nearby hinterland. The secondary school here has been previously threatened with closure which led to a belated recognition of the need for housing. This must not be allowed to happen again. Counsel has been retained to discuss the case at a hearing.

(Please continue on a separate sheet if necessary)

Please note: *The Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate in hearing session(s). You may be asked to confirm your wish to participate when the Inspector has identified the matters and issues for examination.*

Office Use Only	Part A Reference:
	Part B Reference:

Signature:	R C Mills MRTPI	Date:	18/02/2021

Office Use Only	Part A Reference:
	Part B Reference:

PRE-SUBMISSION DRAFT OF THE SHROPSHIRE LOCAL PLAN REVIEW 2016 TO 2038

REGULATION 19 CONSULTATION REPRESENTATIONS

RELATING TO: KEY CENTRE: CHURCH STRETTON

LONG TERM POTENTIAL SLAA SITE CST028
(Identified in Regulation 18 consultation)
NEW HOUSE FARM,
CHURCH STRETTON

S5.1. Development Strategy: Church Stretton Key Centre

Morris Properties Ltd are a major Local Shropshire Developer and holding company and have proposed this site as a strategically important site for the Town of Church Stretton since prior to the SAMDev in 2015. The site not only offers the prospect of development of the particular site for a much-needed housing development but also reiterates a preferred strategy for the town considered in the original SAMDev evaluation and provides an agreed Key strategic access off the A49 which had been endorsed the Highways England and

is detailed in a report attached to this submission. This offers the much broader public benefits of opening the prospect of development of other land including some in this LPR review. It further offers the opportunity for improved visitor access to the town and to the hills further to the east, car parking and support services giving relief to the pressures for development on the western side of the Town.

The history of the promotion of this site and the Shropshire LPA recognition of it as a suitable site for long term development is fully detailed and documented in the Regulation 18 representations and reports attached to this submission at **appendix 1.**

The proposed policy strategy correctly notes the importance of this Main Town as a Key Centre for the delivery of services in support of a wide area in the LPR including housing development.

However this representation submits that the Local Plan Review as proposed moving forward is unsound in that it does not deliver the stated objectives of this policy in this settlement and fails to deliver any new allocations for housing Development. Instead, it relies on a just two sites which has been saved from the previous SAMDev consideration, but two that have not been delivered in the last 8 years. Other SAMDev sites which were previously included at the expense of site CST028 have all failed to deliver any housing for the settlement and have been withdrawn.

The upshot is that the last significant planning permission that was granted in this Key settlement of Church Stretton was granted in 2008 renewed in 2011 at Lawley Close. Given that none of the SAMDev sites have delivered any measure of housing and no new housing site allocations are proposed in this review, which takes in a plan period up to 2038, the Development Plan will have failed to meet the housing needs of the settlement and the area that it serves in terms of housing allocations for more than 28 years. The only housing that has been delivered are

windfalls and housing delivered by extant consents granted before and prior to SAMDev.

The constraints of the town in terms of its landscape status and location within the AONB, noted in this Review have long been recognised. The Shropshire County Council as the LPA in the 1960s realised that once the land to the south which was not in the flood plain had been built out it would require some land to the north of the town and land to the on the north eastern side of the town to come forward. The permission for the Battlefield housing development was the forerunner of this recognition. However, the access constraint imposed by Watling Street North Limited future expansion in this direction and access was not available from the A49 bypass at that time.

This has now changed, and Highways England have agreed the new access to serve the eastern side of the town. As the attached regulation 18 statement indicates this new access will serve as a new public access to a number of sites that have been recognized in the SLAA as having Long term future potential and that have been put forward in this review and offer the long term potential to land on the lower regions of the settlement which are well screened in the land scape and will provide for future needs of the settlement reliving pressure for further infilling on the older established area of the town.

The Development Strategy correctly notes the importance of this Main Town as a key Centre for the delivery of services in support of a wide area in the LPR.

Paragraph 2 notes: -
“Church Stretton will act as a Key Centre and contribute towards strategic growth objectives in the south of the County, providing of around 200 dwellings and around 2 hectares of employment development. New housing and employment development will respond to local needs”.

But the Plan as configured does not meet these objectives and is not considered soundly based.

It is acknowledged that the Council's planning officers are in a difficult position finding, to quote a policy officer, a "least worst" site in Church Stretton which can provide a supply of deliverable dwellings sufficient to address the housing needs of the community, thereby complying with the requirements of the NPPF, NPPG and the Housing Delivery Test, whilst, at the same time, ensuring that the harm to the AONB is kept to a minimum.

CONCLUSION

It is contended that the lack of any housing allocations proposed, for this Key settlement make the LP review outcomes unsound.

It is contended that, of all the major sites put forward for consideration for inclusion in the SLAA and LPR at Regulation 18 stage, the CST028 site at the Regulation is the "least worst" in environmental terms, suffers from the least constraints and is best in terms of long-term sustainability and deliverability for the Town as a Whole.

It can also facilitate access to the "long term potential" CST033 and 034 sites, thereby unlocking their development potential and provide a more cost-effective alternative access to the 14/01173/OUT site, thereby facilitating its delivery.

The CST028 site is in single ownership, has no known legal or physical constraints or impediments and can be delivered quickly in accordance with the requirements of the NPPF and by a Local Shropshire developer.

SUPPORTING PLANS & REPORTS

The technical reports and assessments which support the development of the CST028 site can be found on Shropshire Council's planning web page under

application number 14/04374/OUT. The highways report is attached to this submission.

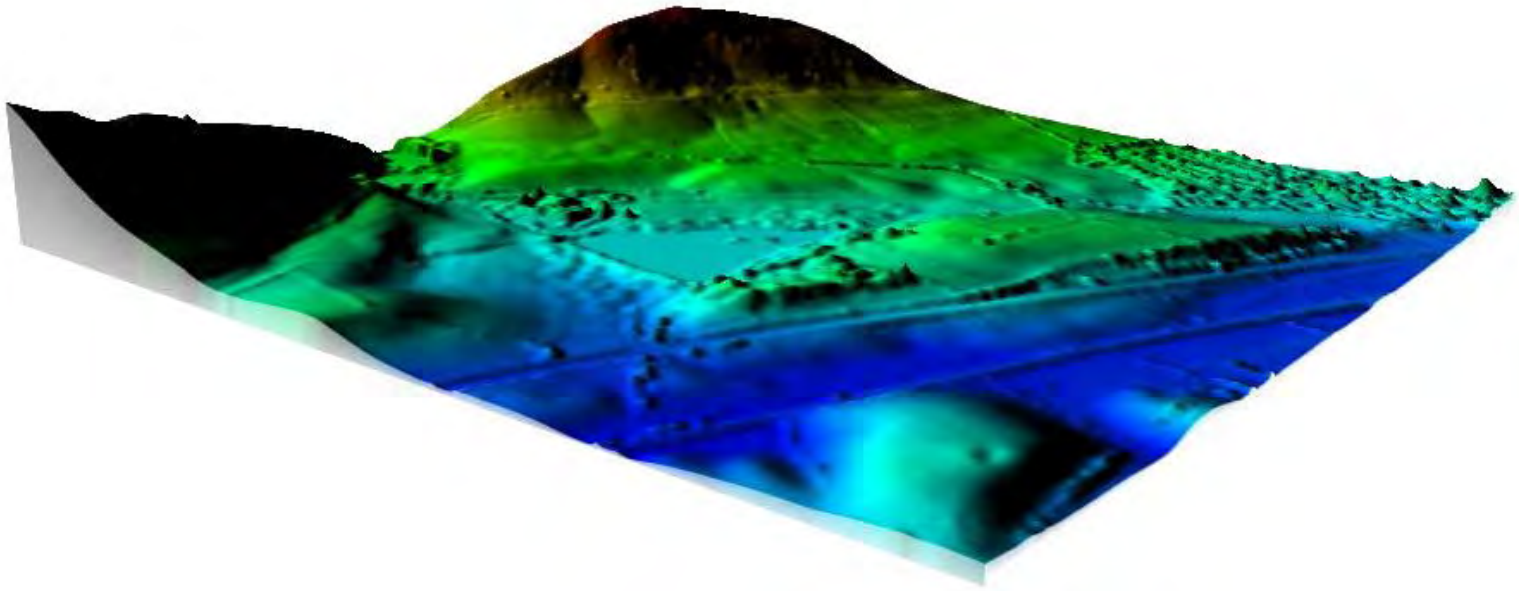
If the Council resolves to allocate the CST028 site for residential development in the LPR, these reports and assessments will be updated to accompany a formal planning submission.

Appendix 1 - Concept masterplan 16004-01 Rev L.

2- Highways/Access assessment.

Proposed Development at New House Farm, Church Stretton

Landscape Strategy Report:
Protection of the AONB



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4.0 3D Digital Terrain Model to Show Landform (1 km x 1km Surface Area)

5.0 Summary of Landscape Strategy Proposals –
Refer to John Challoner Associates Landscape Strategy Plan dwg. no. LA3379.1.Rev.A

6.0 Descriptive Selection of Photographs and Panoramas

Appendix A –

Photograph View Points
Photographs 3 – 6, 10 – 22.

Photograph View Points
Photographs 1, 2, 7, 8, 9.

1.0 Purpose of Report

Morris Property commissioned this landscape strategy report to assess protection measures required in the Masterplan Design of the site of New House Farm and its surroundings, in order to conserve, enhance and protect the landscape of the Shropshire Hills Area of Outstanding Natural Beauty (AONB) for planned future residential development proposals and recreational and leisure orientated opportunities that exist across the site. This landscape architectural design study has been carried out by John Challoner, a chartered landscape architect with over 25 years experience.

The report accompanies and supports the work of all other external consultants engaged on this project. The Masterplan Design Layout has been modified and developed to offer a realistic, manageable and flexible solution for the whole land area of New House Farm.

It is most important the landscape design has taken account of the type of landscape that exists beyond all site boundaries and land viewable at distance from the site. Changes in the landscape affect everyone. This study encompasses the whole landscape setting of Church Stretton and provides a balanced and comprehensive design of landscape strategy proposals fully integrated into Masterplan Proposals.

To reduce the impact of future development located in the AONB, this study analyses the parts that make the whole, over an extensive area beyond site development boundaries. This approach affords a better understanding of the sense of place and allows mitigation and improvement measures to be put in place and implemented to reduce any impact and protect, enhance and conserve the natural and man-made landscape characteristics of the site and surroundings within the AONB. The new development shall afford future opportunities through agreement with the landowner, for improving pasture fields throughout the area in terms of more sustainable agricultural land use practices with an emphasis on improved bio-diversity and ecological land management. Both The National Trust and The Woodland Trust, already own and manage sites in the district to safeguard and protect the interests of the AONB. This type of ownership should be encouraged for the leisure and recreational opportunities that exist at New House Farm.

As part of the progression of design ideas for the site, the landscape design strategy principally considers:

1. Shropshire Hills AONB Strategy for period 2014 – 2019.

2. A review of visual impact assessment with additional supporting documents showing landform across the site and surrounding areas coupled with significant site features, mapped and interpreted through coloured Digital Terrain Modelling to give a clearer picture of how landform provides screening to parts of the site.

3. Aerial photography highlighting the scale and extent of urban development around Church Stretton, and the envelope of tree and woodland coverage associated with historic field patterns and hedgerow boundaries that has helped shape future field layout proposals.

4. An appreciation of primary views in and out of the site to establish site view ability.

5. Spatial organization of the site to assess the existing network of public access along roads and footpaths and how this fits alongside the creation of new roads and footpaths including any diversions / stoppages and rejuvenated ancient routes worthy of conservation.

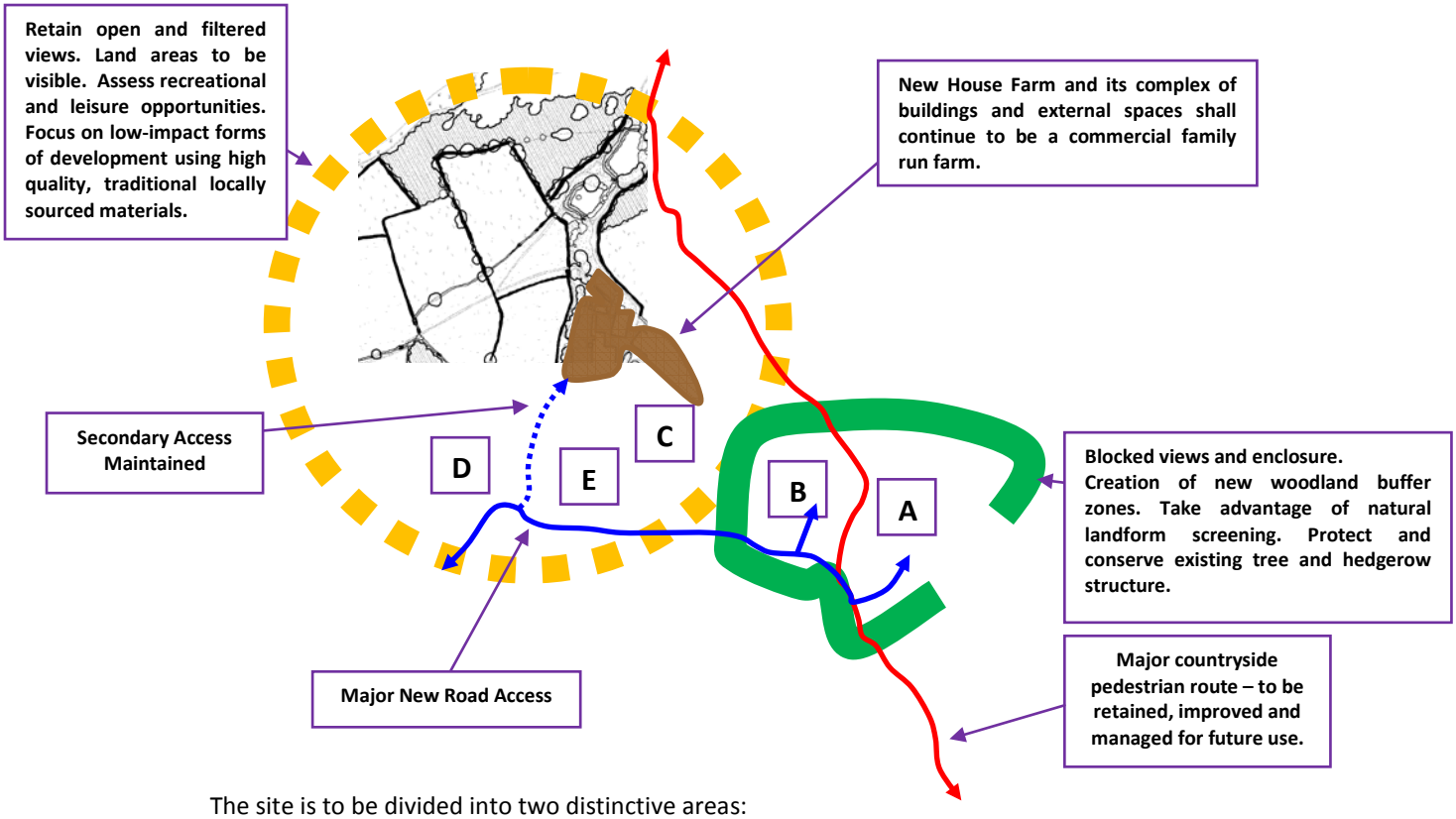
6. The scope for locating new leisure orientated, locally managed business opportunities on the site and re-development of existing recreational activities e.g. fishing and archery.

7. Existing and future tree and hedgerow structure.

8. Existing ecological land values and the improvement and enhancement of future land use quality standards.

Photographs in this report were taken on the 17th July 2014 in dry bright sunny conditions and during an overcast dull day on the 4th September 2014, using a Nikon Coolpix P50 digital camera with optical zoom lens 4.7 – 17mm and a resolution set at 1280 x 960 pixels. Stitching software used in the panoramic photographs is ArcSoft Panorama Maker 6.

2.0 Landscape Design Strategy – Concept



The site is to be divided into two distinctive areas:

1. Residential Development Land – comprising fields A & B, to be totally enclosed by existing tree belts, hedgerows and new proposed woodland. This green infrastructure provides a natural buffer zone and screening belt between the open countryside and townscape and maintains a characteristic feature of the Church Stretton landscape in providing extensive tree cover at the extent of built form. Division between the two development fields is provided along an ancient drove road, with the opportunity to divert the existing public right of way to follow this alternative route along a deeply incised cutting, edged in protected mature woodland belt, principally of Oak and Ash dominance. The improvement of surface water drainage and surfacing along this route shall help protect and conserve this distinctive site feature, which is totally concealed from view. It will provide a direct countryside pedestrian route without loss of any character, from Church Stretton, along Cwms lane leading to Caer Caradoc Hill. There is also scope to increase the number of footpaths that traverse surrounding slopes and the new development offers the opportunity to provide circuitous local walks in the immediate vicinity.

2. Recreational and Leisure-orientated Development Land – comprising fields C – Leisure Cabins, and D - Archery, the existing lake (E) and New House Farm with surrounding fields of pasture land. This whole area encompasses the rural agricultural landscape and is to be deliberately kept open in aspect and viewable from the many higher vantage points overlooking this part of the site. The existing recreational sports of fishing on the lake and archery in field D shall be retained, with scope to improve facilities and to generally upgrade the ecological value of the whole land area. There is a leisure development proposal to site holiday accommodation in field C. An earlier proposal to develop field D into a small business estate has been dropped.

The main vehicular access route makes use of the existing junction and access track to New House Farm directly off the A49 trunk road and partially follows this route before rising and skirting along the western lake margin. This route follows a boundary line of existing mature tree belt and hedgerow to be retained, leading to fields B and A. The impact of this road shall be reduced by the provision of new screen planting of native tree belts and hedges. Interestingly, this re-introduces woodland tree cover in an area of the site which was once covered in tree belts dating back to the 1883 historical map. Secondary vehicular access is to be maintained off this junction to New House Farm. A third vehicular route linking the farm to Cwms Lane is to be partially removed where it crosses field B and re-routed to join the new development road. This small lane to the farm shall be used mainly for future maintenance and pedestrian access, and general farm access as exists at present.

The principal pedestrian route shall be retained along a pedestrianised section of Cwms Lane leading to Caer Caradoc through a diverted footpath section that follows an ancient drove route. This significant site feature is deeply incised into the rising land contours and is totally concealed by a belt of mature oak and ash woodland belt, recently protected with a Group Tree Preservation Order. The cutting provides the main access to the higher fields of New House Farm and its status is to be improved for proposed future use as the main pedestrian route. This opportunity shall segregate use between footpath users and the residential development land flanked either side and because this cutting is between 3 – 4 metres deep, the route is totally screened.

The landscape strategy design has also considered the following site elements working in partnership with other design team members that include the Architect, Highway Engineer, Drainage Engineer, Ecologist, Arboriculturist and Planning Consultants:

- Surface water drainage of the site.
- Implementation of SUDS for managing future road and housing drainage schemes with the creation of swales, balancing ponds and ditches.
- New tree protection orders to establish no build zones around retained mature trees and to put in place sustainable design solutions for protecting tree root zones.
- An opportunity to improve and enhance the ecological and bi-diversity value of the site and surrounding fields and hills.
- Enhancement of the existing fishing lake to create new marginal and aquatic habitats.
- Short term measures to improve the management of existing recreational activities current on the site.
- Scope for the creation of off-site areas for improved public access and low key recreational and leisure activities including children's play space.

3.0 Background to Protective Legislation in Church Stretton

Examples of primary man-made post-war impacts on landscape associated with Church Stretton and surrounding land use are:

1. Intensive farming practices resulting in removal of hedgerows to increase size of enclosure and the loss of semi-natural unimproved grassland and tree cover.

2. Reduced tranquillity due to increased traffic flow along the A49 Trunk Road.

3. Increased urbanization and development of imposing standardized suburban residential developments (Oaks Road, Helmeth Road, Alison Road, Hazler Orchard, Ragleth Road, Chelmick Drive, Poplar Drive, Churchill Road, Ashbrook Crescent, Stretton Farm Road) of poor design standard, lacking in building styles and local distinctiveness.

These impacts have occurred during the post-war movement to protect the countryside. Protective legislation was first achieved with the introduction of statutory powers in the creation and designation of the National Parks and Access to the Countryside Act 1949, and in designation of the Shropshire Hills Area of Outstanding Natural Beauty (AONB) 1958.

Today, this area is one of 46 AONB's in the UK, alongside 15 National Parks, each making up a diverse collection of unique landscapes of the finest quality. The AONB legislation is of national importance, each designation being managed locally. The main purpose being to work together in partnership to conserve and enhance the natural beauty of the landscape, while taking account of economic and social needs, sustainable development promotion and meeting the demand for leisure and recreation.

The Shropshire Hills AONB Partnership co-ordinates this work, and is supported by Shropshire Council and Telford & Wrekin Council, who share joint statutory responsibility for the preparation of a Management Plan. The Plan is reviewed every five years and the latest Plan was approved in March 2014.

It is important to note that AONB designation is not a barrier to change, but accepts and manages change in a positive way to secure the maximum benefit for the area. Strategic themes for the period 2014 – 2019 are:

A. Conserving and enhancing our outstanding landscape and its nature – wildlife, heritage, tranquillity, and appropriate development.

B. Helping our local communities thrive in a more sustainable way – farming and land management, prosperity and wellbeing, low carbon

C. Promoting personal enjoyment, understanding and participation – for local people and visitors, sense of place and belonging, doing and taking part

D. Maintaining and enriching the natural services on which we all depend – ecosystem services (air, water, food, climate, etc.) and wider benefits to society

Church Stretton has a town population of 4,671 (2011 census) and lies at the heart of the AONB. The New House Farm site lies north east of the town, partially concealed by landform comprising a partially tree covered low whaleback drumlin (low elongated hillocks) running though the valley bottom. The eastern skyline is dominated by the sharply rising volcanic hills of Ragleth Hill, Hazler Hill, and extensively wooded Helmeth Hill forming the backdrop to the main development site and to the north, the southern crest of Three Fingers Rock of Caer Caradoc Hill dominates the skyline. Lying opposite is the imposing monolith of The Long Mynd, the favoured site for hoards of day-trippers exploring the deeply incised valleys.

Two lesser known and what is considered to be significant influences which have helped protect the unique character of this huge whaleback upland plateau are:

- Common Land – centuries of land management dating back to Saxon times, this private land covers the Long Mynd plateau and valley sides with grazing rights for up to 88 people who own them today. These ancient rights have helped preserve habitats, keep away development and increase nature conservation value. The Commons Act 2006 takes account of effects of public interests, including landscape, biodiversity, access and the historic environment.

- The National Trust – the UK charitable organization acquired by public subscription over 2000 hectares of the heather upland in 1965 and 1978, followed by the 120 hectare purchase of Carding Mill Valley in 1979. Land ownership allows the trust to carry out vegetation management practices that conserve the heather upland. Joint working relationships with the Long Mynd Commoners Association and Natural England, reduces the threat of overgrazing and erosion. Bracken and gorse encroachment can be controlled and honey pot tourism managed.

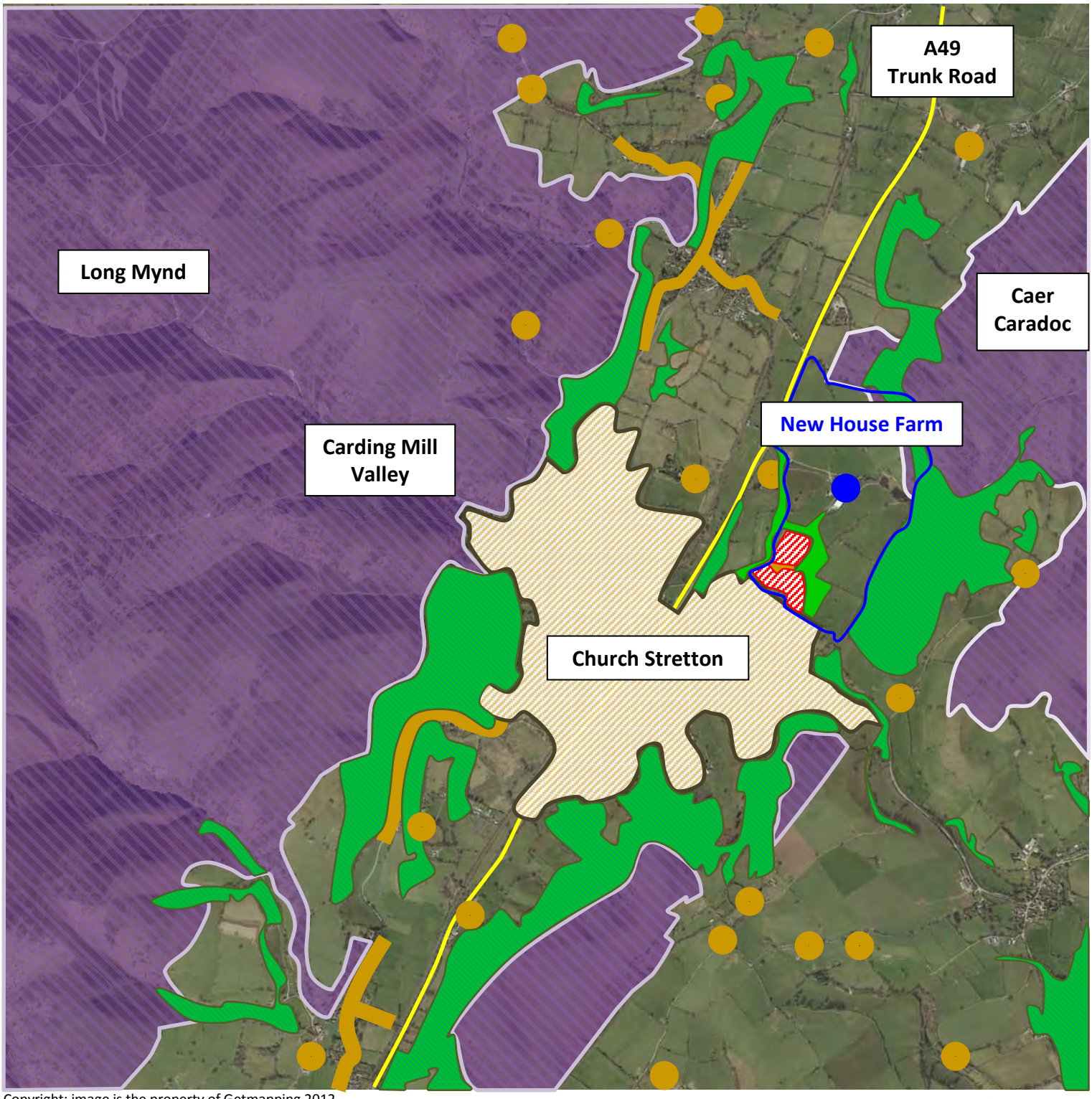
Today, the Long Mynd is a Biological and Geological Site of Special Scientific Interest (SSSI).

Crossing the valley and sited adjacent the New House Farm site is the ancient Sessile Oak Woodland covering Helmeth Hill. It is a site owned and managed by The Woodland Trust.

Amidst all of this legislative protection, over the centuries like so many towns in the country, Church Stretton has experienced progressive development and the town shall continue to develop in tune with the strategic policy themes highlighted above, that form an essential part of the Shropshire Hills AONB Partnership Management Plan.

The planned development at New House Farm supports this vision. There is scope to develop the leisure and recreational opportunities in partnership with conservation organisations and local business and with parts of the site perhaps being acquired by the National Trust, to create a new hub of tourist attraction and visitor facilities. This would help disperse visitor numbers more widely across the district and reduce the pressure of high visitor numbers and traffic congestion experienced at Carding Mill Valley. During the busiest times of the year, there is scope for a scheme of temporary car parking.

Map a. Aerial Photograph of Church Stretton and Surrounding Land Use
(4km x 4km square area)



Key:

N

Open Moorland –
upland heath and rough pasture

Mature Woodland –
predominantly Sessile Oak

Pasture Fields

Church Stretton Townscape

Linear Settlement –
along roads

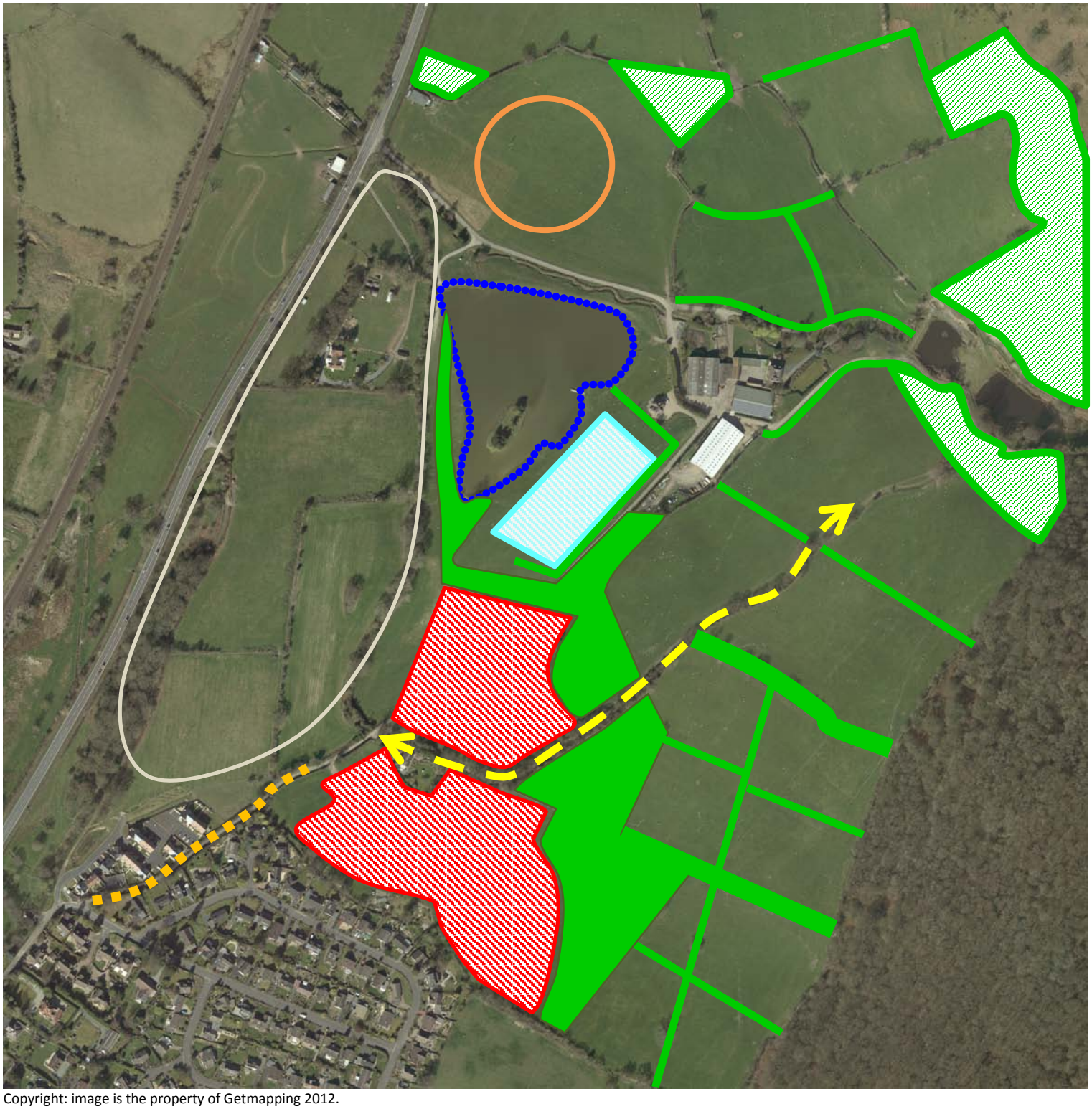
Dispersed Settlement –
farms and isolated properties.

Proposed Residential Site –
enclosed in new woodland

The mapping of the Church Stretton townscape clearly shows a nucleated settlement equally developed each side the A49 trunk road. The wavy townscape edge of built land gives an interesting picture of the nature of development showing spurs of development departing from the centre mainly along the principal roads and railway line. The extent of development is limited and blocked by the expansive swathes of mature woodland along the steeper valley sides.

The proposed development site at New House Farm is clearly marked and is indicative of a new spur of development north eastwards. The scale of this built area is not out of character with the townscape shape and size from this aerial viewpoint. The proposed planting of new woodland enclosing the development shall act as a stop-barrier indicating the limit of development.

Map b. Aerial Photograph of New House Farm Site Showing Proposed Structure (exc. Road)
(1km x 1km square)



Key:

Proposed Woodland Planting (Hatched Areas including hedgerows, to be agreed with landowners)

Proposed Residential Site

Proposed Holiday Accommodation

Potential Expansion of Archery Club

Cwms Lane Pedestrianisation

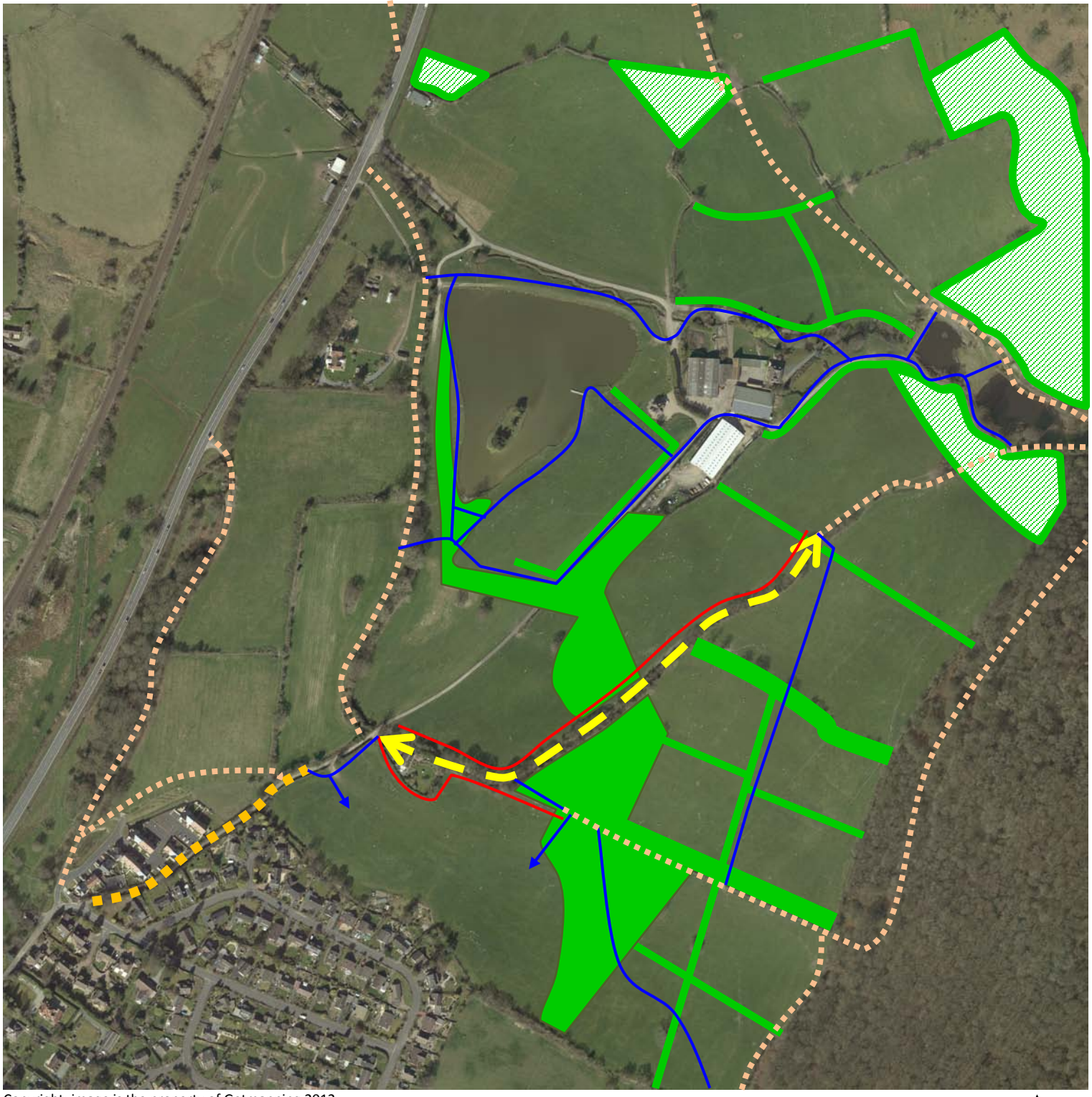
Proposed Diverted PROW along Ancient Drove Route

Hedge Planting along New Field Boundaries

Natural Landform Screening Hillock

Create New Marginal and Aquatic Habitats around Lake

Map c. Aerial Photograph Showing Existing and Proposed Footpath Network



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Key:

Proposed Woodland & Hedge Planting (Hatched Areas including hedgerows, to be agreed with landowners)

Existing PROW Retained

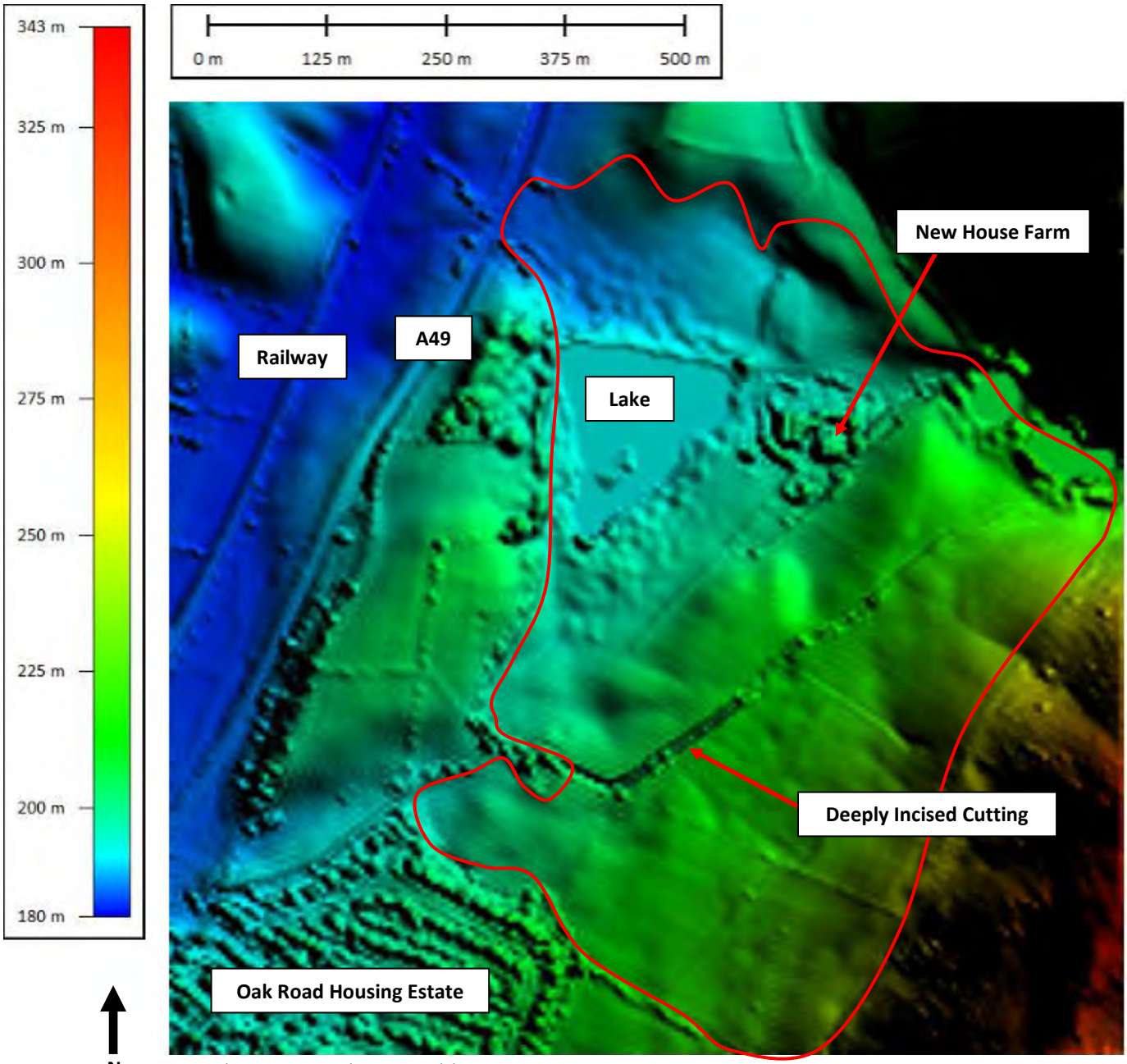
Existing PROW to be stopped and Diverted along Ancient Drove Road

Cwms Lane Pedestrianisation

Proposed Diverted PROW along Ancient Drove Route

New Proposed Footpath Routes To be agreed

4.0 Digital Terrain Model to Show Landform (1 km x 1km Area)



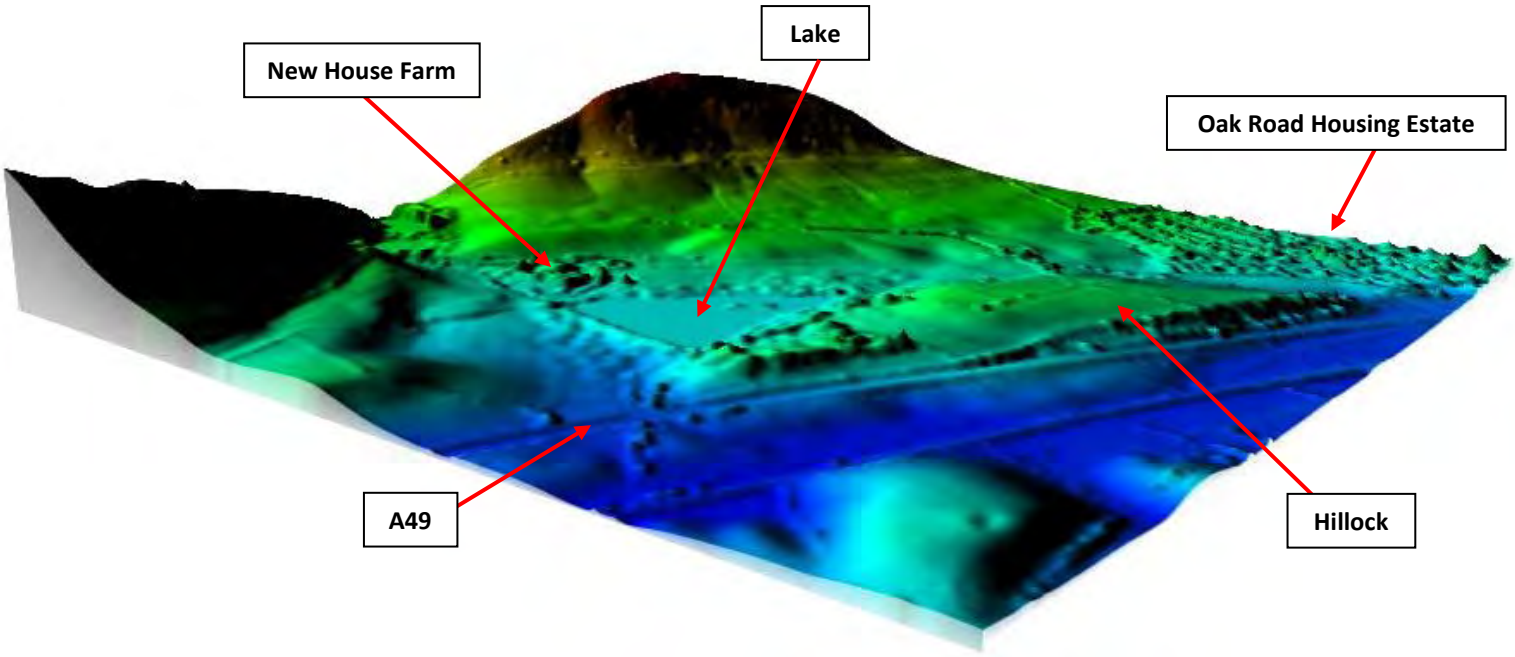
Copyright: Getmapping Elevation Model.

3D Digital Terrain Modelling is a useful tool to show a visual impression of changes of level in land surfaces. For the purposes of this study, NEXTMap data is used to create a Digital Surface Model (DSM) to give a representation of the ground profile including all buildings and vegetation in 3D. The above plan view shows a 1km x 1km land surface area and the site boundary is marked in red outline. The pictures that follow are computer generated images of various viewpoints illustrated in 3D.

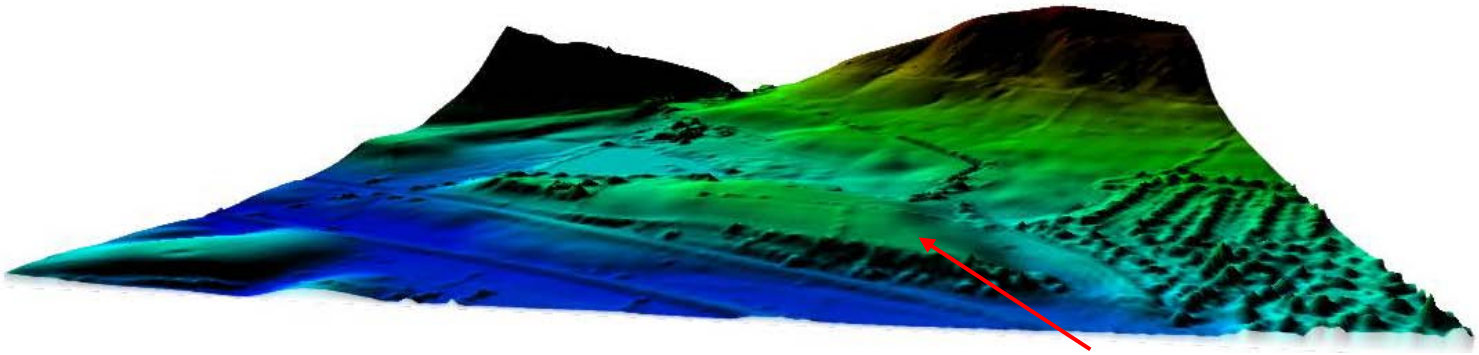
To understand these images, colour indicates height in metres above sea level. Blue are the lowest land levels rising through green, yellow, orange to red showing the highest elevations. The distance scale is shown at the top of the page in linear metres.

The computer software generates triangular height data and this is plotted on each image, taking the appearance of a pyramid. The 3D images show trees and buildings plotted as pyramids, the top point representing the height of tree or building above ground level. The higher the point above ground level, the bigger the pyramid and vice versa.

The above plan shows the lake in a light blue monotone colour with no blemishes, indicating the flat surface of the water. Darker shadows and pimples indicate more significant changes in the height of land contours, showing trees, buildings and undulations in ground profile. Tree belts and hedges are visible, shown as pimple-like protrusions, in the same way that the Oak Road housing estate can be seen. The tree lined A49 trunk road and railway is clearly marked running through the dark blue area, the lowest part of the valley. The deeply incised cutting is also visible.

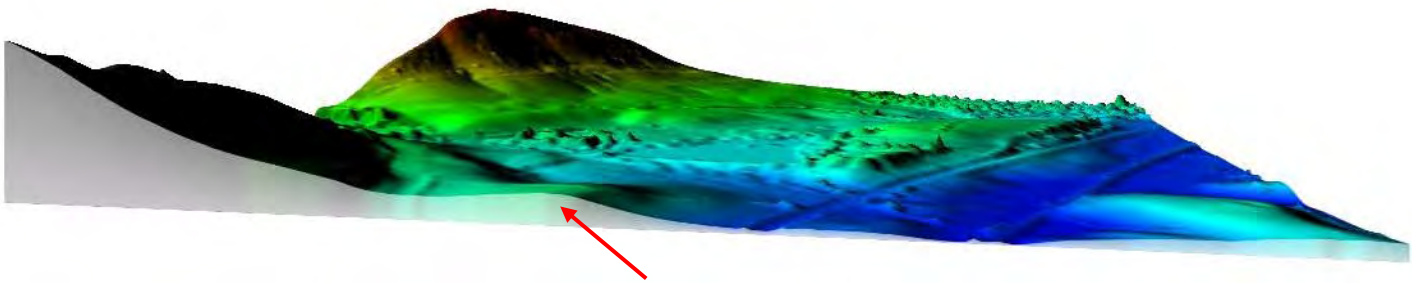


3D Image (i) – showing elevated view south east across the site. Note the landform screening hillock in the foreground rising above the valley bottom and A49 trunk road.

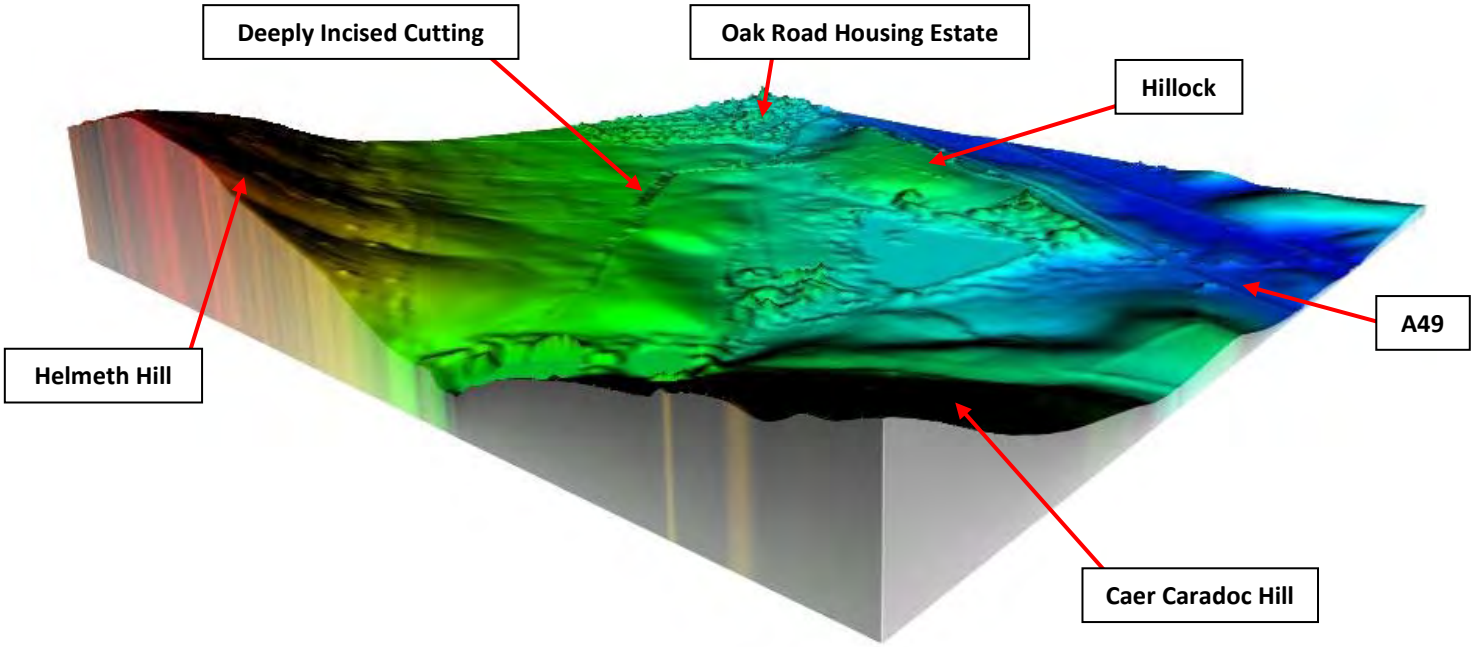


3D Image (ii) – similar height above ground level to (i) showing elevated view east across the site. The foreground landform screening hillock conceals the western site boundary where the new access road is to be located.

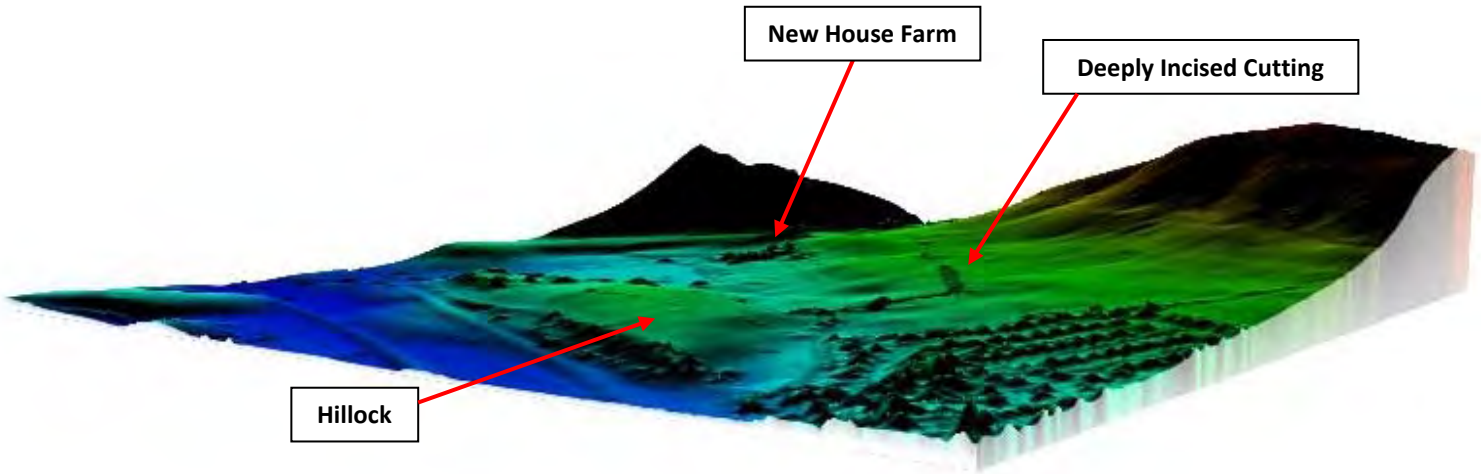
3D Image (iii) – showing low level view east across the site. The foreground landform screening hillock conceals a large part of the development sites.



3D Image (iv) – showing elevated view south across the site. The foreground bump in levels along the lower fields, is where a low ridge rises above the archery centre along the hedge boundary and blocks the view northwards from the access road leading to the farm.

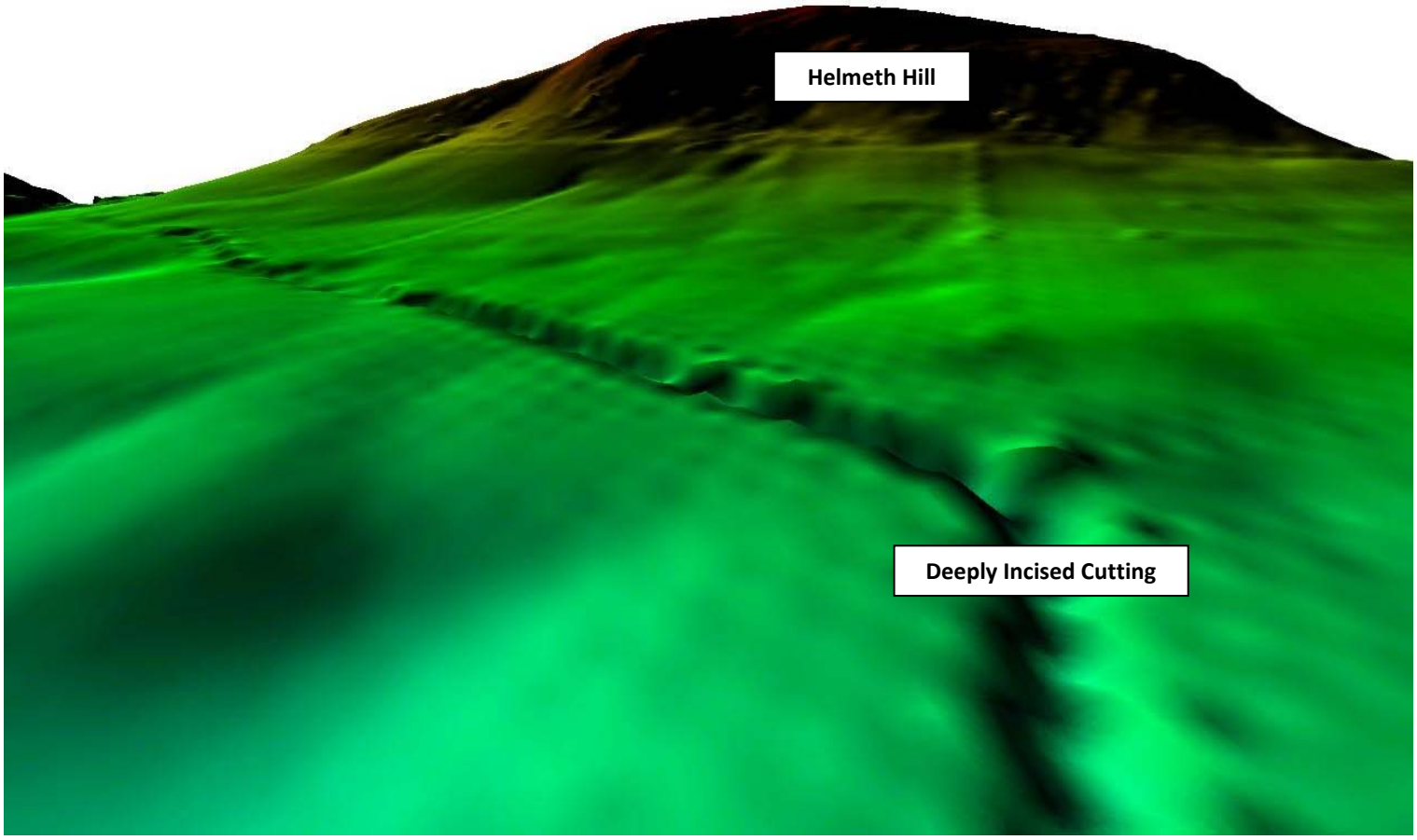


3D Image (v) – showing elevated view south west from behind Caer Caradoc Hill. This view gives a good indication of the low whaleback drumlin (screening hillock) located between the lake and A49, creating a hidden shallow valley not visible from Church Stretton and the Long Myndd. The rising swept contours towards Helmeth Hill (left) is clearly visible and the Oaks Road housing estate prominent in the top corner.

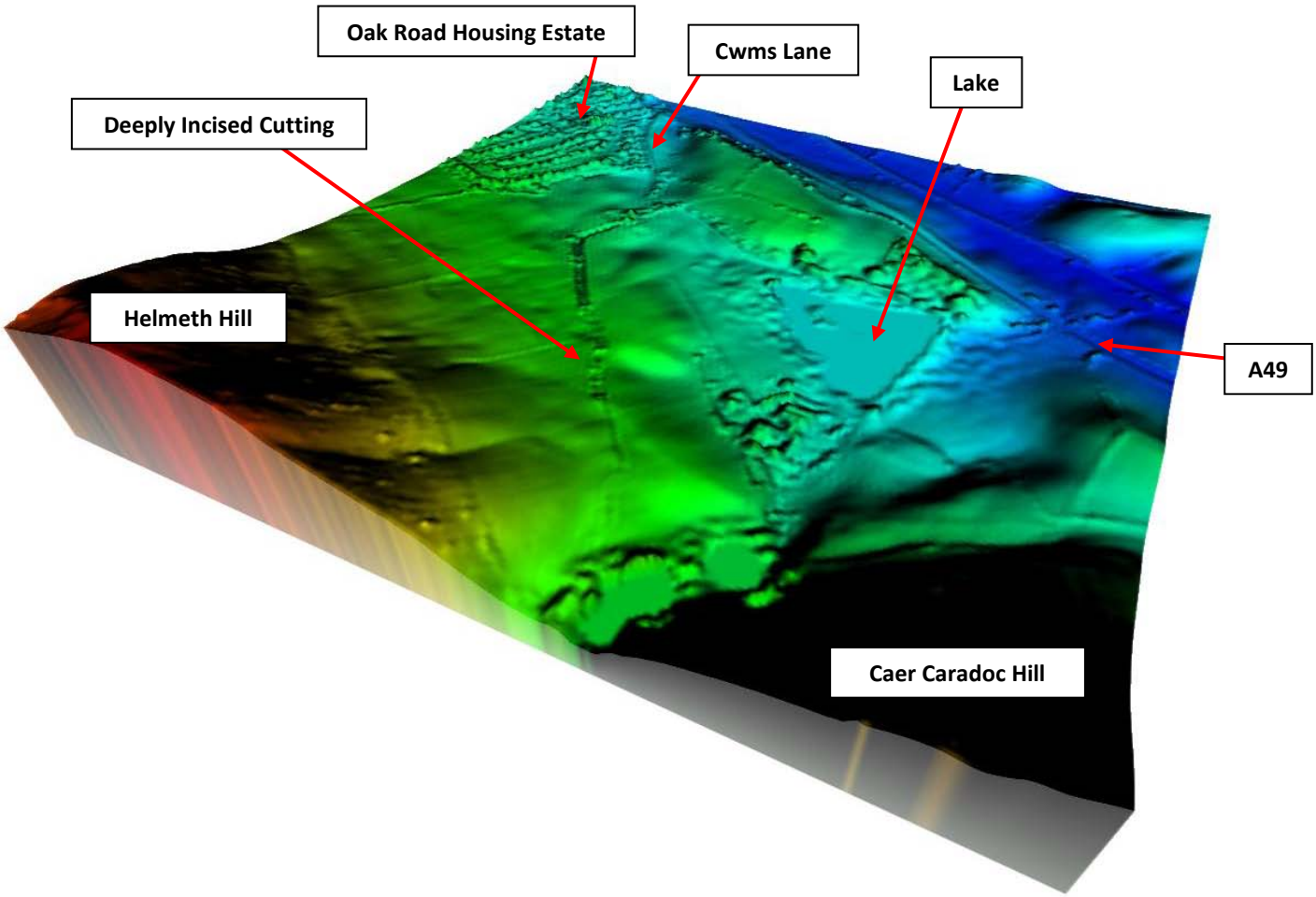


3D Image (vi) – View north east in the opposite direction to (v).

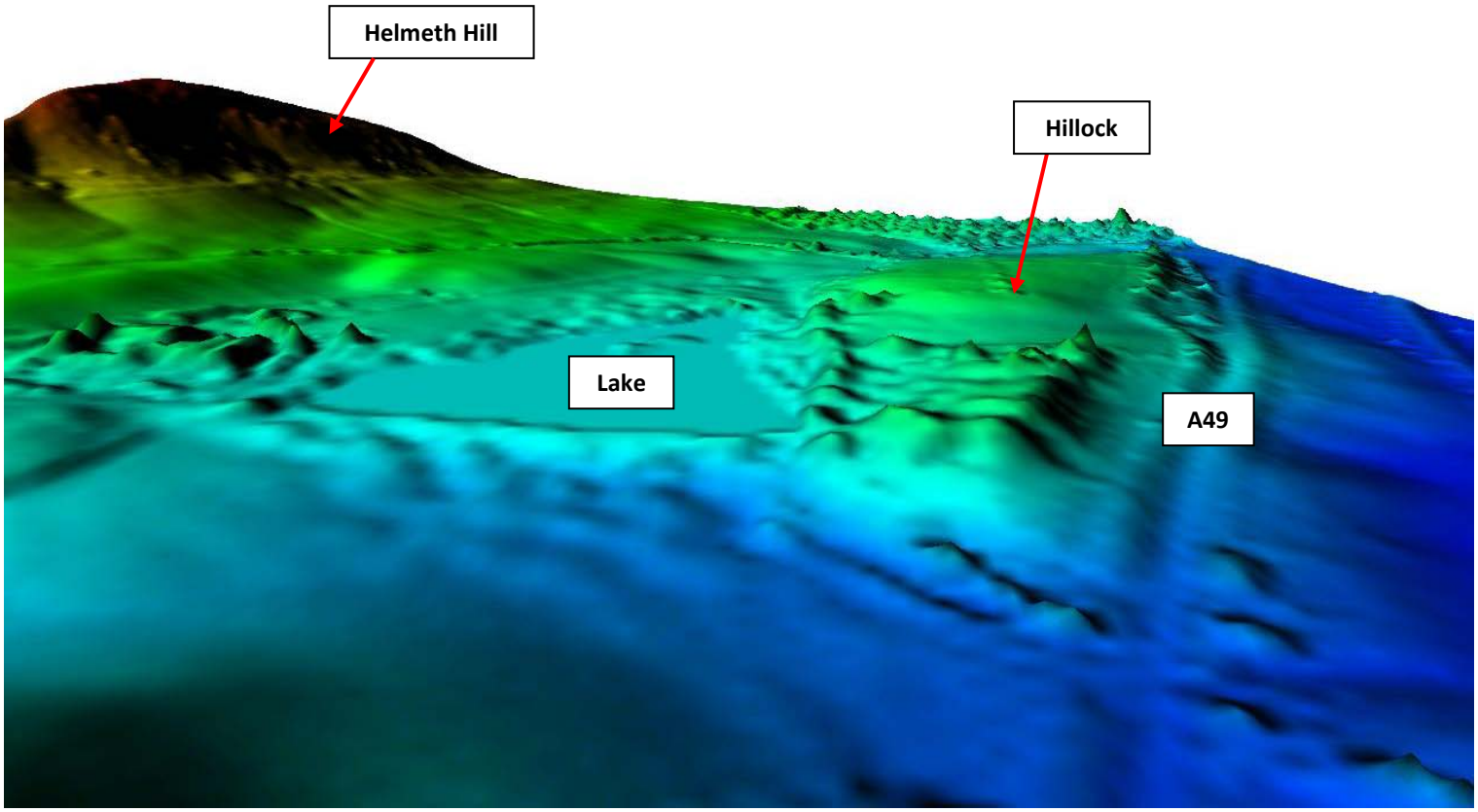
3D Image (vii) – view north showing the swept concave ground profile of the rising land from the Oaks Road housing estate to the top of Helmeth Hill.



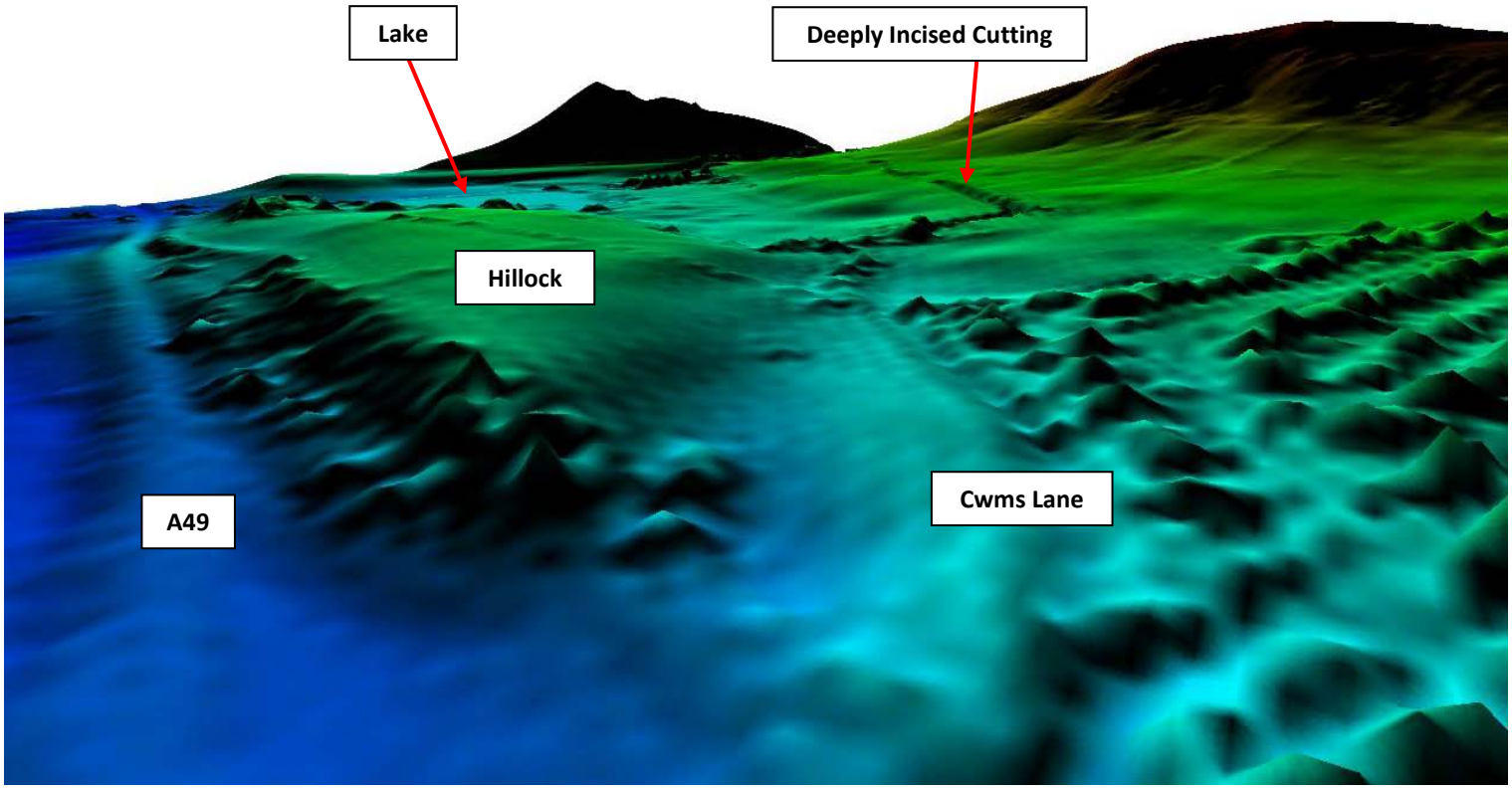
3D Image (viii) – zoomed-in flyover showing the distinctive feature of the deeply incised cutting creating a concealed scar on the landscape. This view is east / north-east.



3D Image (ix) – an oblique overhead view of the site area. Note the meandering line of Cwms Road leading to the incised cutting providing a direct access route into the valley between Caer Caradoc and Helmeth Hill.



3D Image (x) – showing elevated zoomed-in view south across the site focusing on the lake.



3D Image (xi) – showing elevated zoomed-in view north across the site, following the line of Cwms Lane and showing the more pronounced steeper side to the small tree covered hillock that rises steeply above the A49 corridor. The deeply incised cutting is very discernible to the naked eye.

5.0 Summary of Landscape Strategy Proposals –

Refer to John Challoner Associates Landscape Strategy Plan dwg. no. LA3379.1.Rev.A

Native Woodland Planting – Agree Extent of Works with New House Farm
Oak dominant species with Ash & Birch and understorey of Hazel, Rowan, Holly, Blackthorn, Elder.

Infill Planting to Existing Hedges –
Hawthorn & Blackthorn.

Native Hedge Planting – Agree Extent of Works with New House Farm
To increase enclosure to existing fields and improve green infrastructure across the whole area, reducing field size and reinstating old historic boundaries. Hedges to be a varied mix of species based on location comprising Hawthorn, Blackthorn, Hazel, Dog Rose, Field Maple, and Crab Apple.

Tree Belts 15 metres wide along Existing Hedges – Agree Extent of Works with New House Farm
Where old field boundary hedges are fragmented through loss of tree cover, a native mix of new tree and hedge planting shall be carried out to provide a long term shelterbelt.

Avenue Native Tree Planting –
To provide more open tree cover along access routes and creating a distinctive future site feature channelling views along accessible corridors. Ground level vegetation around trees to be grassland, to retain an "open feel" along the avenue.

Group Native Tree Planting –
To provide strategically placed tree cover in open grassland areas of the site, to be agreed.

Native Marginal and Aquatic Planting to Existing Lake Margins (E) and New SUDS Balancing Ponds (F) –
This type of planting shall improve the biodiversity and ecological value of the area, creating new habitats for the benefit of wildlife. Improve fishing management of the large lake with defined footpath access, creation of fishing platforms and spaces to protect lake edges, scope for new car parking facilities in defined areas of the site and new sections of boardwalk and reinforced sandy beaches along lake edges where direct access to the water is required, for example, kayak activities.

Creation of Low Maintenance Grassland along Verges and Lake Margins.

Potential for Improvement to Pasture Fields Subject to Agreement with New House Farm –
The new development shall afford future opportunities through agreement with the landowner, for improving pasture fields throughout the area in terms of more sustainable agricultural land use practices with an emphasis on improved bio-diversity and ecological land management. Re-introduce annual hay making and reduce the period, frequency and numbers of grazing animals.

Existing Section of Farm Lane giving Access to Cwms Lane –
To be removed where it crosses the proposed development field B over 195 linear metres and diverted as shown (refer to section 2.0 for location of field B).

Existing Small Sections of Hedge to be Removed –
Over four small sections to allow extra space for the construction of the new access road. This includes a 70 linear metre section of hedge along the east boundary to Cwms Lane, which can be re-planted along a new grass verge and footpath where the new road creates a wider corridor to the Lane.

Existing Position of Ancient Drove Route in Deeply Incised Cutting –
This significant and neglected site feature is to be retained and improved to create a new diverted public right of way for walkers only, leading from Cwms Lane to Caer Caradoc. The existing tree belt following the line of route has recently been protected by Shropshire Council. For further details of indicative proposals to re-juvenate this feature.

New Vehicular Access Road –
Use of existing junction off the A49 trunk road with associated visibility improvements. Route follows western site boundary, heavily vegetated along a boundary line of existing mature hedgerows and tree belts and further protected and concealed by rising landform. Further planting of new tree belts along the eastern road edge shall totally conceal and segregate the road from the fishing lake.

New Layout for Estate Roads –
Access roads in field A have been designed to traverse the rising slopes to reduce the visual impact (refer to section 2.0 for location of field A). Many of the modern estate roads in Church Stretton have been built running directly up the rising valley sides forming a prominent and visible scar in the landscape. The Edwardian period of development in Church Stretton constructed roads traversing hillsides and running with the contours and coupled with heavy tree and hedge planting, the overall visual impact of these roads is reduced and concealed. This is one of the reasons we have designed a winding road layout in field A. It also benefits from a reduced gradient. 10 – 15 metre wide frontages to house plots create sufficient space to plant a native tree avenue, adding to the enclosed tree cover surrounding the development site. For further details of indicative proposals.

Primary Street Tree Planting along Access Roads to Main Development Site –
An indicative position of the internal structure of native tree and hedge planting is shown. The scope for additional tree planting of between 1 – 5 numbers of trees per house plot garden is not shown.

Cwms Lane Pedestrianisation –
Existing road to be stopped for public traffic and pedestrianised from the junction of Helmeth Road to the point where the new access road enters the development field as indicated. Existing countryside character of banked hedges, mature trees and wider sections with grassed verges, to be retained and managed. Emergency & maintenance vehicle access to be provided through permanent robust secure barriers.

Scope for Creation of New Recreational Spaces in Woodland Areas and Enclosed Pasture Fields –
This shall include provision of public open space located throughout the new layout of woodland and pasture fields as indicated on the plan, with informal play opportunities and seating / picnic areas.

Improve Pedestrian Access Across the Site and Surrounding Lane –
Define and implement a new pedestrian network that creates local circuitous walks and more pedestrian footpath links into the wider countryside – through the new layout of pasture fields and woodland, along retained access tracks and farm lanes and existing footpaths. Refer to map c, showing existing and proposed footpath network.

New House Farm Site –
New House Farm and its complex of buildings and external spaces shall continue to be a commercial family run farm.

Site for Lakeside Holiday Accommodation –
Provision of high quality units with low impact sustainable architecture of repeat design arranged in an orderly layout for strong design simplicity without any fuss. The whole field is to be upgraded into the creation of a visually open low maintenance semi-natural grassland meadow with perimeter hedgerows, an orchard avenue and central group native tree planting as shown. Scope for green turfed roofs to each unit with outdoor decked terrace and parking space in reinforced grass. Minimise vehicular access running across the contours. Refer to Masterplan drawing for layout of units.

Site for Expansion of Archery Facilities –
Scope to provide temporary car parking for fisherman within the development proposal. Scheme will provide opportunity for expansion of the Archery Club linked with tourist and leisure development of the hamlet of New House Farm.

6.0 Descriptive Selection of Photographs and Panoramas

Photographs and panoramas are organised into view point locations in the following order:

- All views south
- All views east
- All views north
- All views west
- Views along Cwms Lane
- Photographs showing the incised deep cutting feature

Views South

1. View south west of New House Farm, from the path skirting the hill of Caer Caradoc at 930 feet above sea level. The lake is prominent, all fields are visible. It is the intention of deliberately leaving this landscape view largely unchanged. The new access road will be screened by a new tree belt. This shall tend to merge into the existing backdrop of trees indicated by the red line. New tree cover shall also conceal the access track to the farm leading to the farm (light blue line). The green outline indicates the extent of new woodland belt to screen development field B.

2. View south of track which shall follow the line of new access road. There is limited width at this pinch point between existing boundary hedge on the left and lake edge on the right. It is recommended the lake edge over a section of 25 metres is partially in filled to free-up adequate space for construction of the new road. There is scope to add a new timber deck walkway to form the new lakeside edge in this area. This would allow fishing activities and a walker's path to be kept segregated from the road.

3. View south into development field B. The existing Oak trees, protected by a Tree Preservation Order, demarcate the edge of new woodland and tree belt planting which shall provide the long term screen around the development.

4. Similar view south to (3) showing the existing mature and protected tree belt along the incised deep cutting feature (see 21, 22). These trees totally conceal the view into field A and Church Stretton Eastern valley sides.

5. View forward of the tree belt shown in (4) revealing the open gap in the houses along Oaks Road.

6. New development (see 12) where no periphery tree planting belt exists and no new tree planting has been carried out to screen this view. This is inappropriate and should be avoided. Perhaps it is purposely left open to favour future development of the open field!

Views East

7. Zoomed-in photograph south east from Long Myndd, showing the development site outlined in red, in relation to the north eastern development spur of Church Stretton townscape, being heavily wooded in this viewpoint. Approximately 60% of the development site is screened by landform and existing tree belts. The expansion of woodland planting shall greatly reduce the impact and the visible area of green fields shall be significantly screened by the new tree cover in time.

8. Zoom photograph east from near the golf club in Church Stretton, looking directly at the main development fields (highlighted in brown). Note the stepped rise in existing housing is much more prominent from this viewpoint. Similar to (7), new woodland planting is indicated to give an impression of the large scale of new tree cover to reduce the visual impact. Bear in mind that these photographs (7 & 8) are zoomed-in and the detail shall be less discernible to the human eye. The linear distance is 1.45 km.

9. Zoomed-in photograph showing housing development in Church Stretton. Housing located on the flat valley floor is an eyesore. The eastern valley sides are heavily wooded in this viewpoint and plenty of additional tree cover in gardens helps to give the impression of woodland cover from the valley floor upwards. This demonstrates the importance of group tree planting at regular intervals to create very effective tree cover across a varied expanse of mixed housing types.

10. The site of the archery club – open views towards Caer Caradoc Hill to be retained. There is scope to expand the facilities across the whole level area of the field. The new access road alignment is indicated in blue and this route shall be edged in a new avenue of native trees, continuing up the track to New House Farm. These trees shall provide some filtered views along the road and by retaining stock fencing to the filed boundary, the feeling of wide open space shall be retained.

11. The wide expanse of development field A from the viewed from the field gate access off Cwms Lane. This field is enormous in length being up to 550 metres long. The development shall extend between 180 – 300 metres in length and occupy one third surface area of the field. The view of the upper field (beyond the red line) shall be lost through new woodland screen planting. The existing dense hedge and tree belt along the boundary to the Oaks Road housing estate, forms a very effective screen. The open boundary (ringed) is where the old tree belt has been removed in the past.

Views North

12. New housing development – very urban, no tree planting in front gardens, street lighting out of character with surroundings, road surface in blacktop asphalt contrasting badly with the countryside, very little harmony and balance. This development is visible from the A49. The use of more sensitive colours for the road would improve this view and reduce the visual impact. Lighting columns have horizontal cut-off which is good, but the heavy urbane columns detract. Front gardens are shallow in depth, restricting space for tree planting.

13. The metalled lane off Cwms Lane leading to New House Farm. This is to be removed. The alignment of the new road is indicated in red. The view towards Caer Caradoc Hill shows field B development site in the foreground and the screening block of new woodland and tree belt planting. The top of the hill shall be visible. Additional tree planting indicated in outline for scale and proportion, shall also help to increase tree cover on the development site in each housing plot.

14. Route of existing track leading to lake. The alignment is interesting following the contours and the new access road is to take a similar route to retain the fine group of Pine, Beech and Alder trees visible in the foreground.

Views West

15. Field A western boundary hedge along Cwms Lane. The red line shows the length of existing hedge to be removed for the construction of the new access road. The hedge shall be replanted with additional tree planting approximately 3 – 5 metres forward of the existing hedge (shown by light blue line). This part of the development site is naturally screened by the landform hillock rising beyond the hedge. The ground profile of this hillock is shown by the broken line.

16. Field B western boundary showing the mature tree and hedgerow belt providing a solid screen. These tall trees coupled with the landform hillock, screen at least 80% of the whole of this development site viewed from Church Stretton and the Long Myndd. The new access road (red line) follows the alignment of this boundary tree belt and the road will be screened by new tree belt planting along the open side, to create a closed corridor feel along the route of the road.

17. View west along the lower tracks adjacent New House Farm. A gradual increase in levels from the A49 access junction (ringed) allows the lake to be visible in the middle ground. New native hedge planting is proposed along the line of stock fencing and gaps in existing hedges to be filled with new Hawthorn hedge species.

Views along Cwms Lane

18. The high banked hedgerows of the lower land photographed after a late summer cut and trim.

19. View of the upper lane, banks replaced with grass verges and a wider aspect of view and a less confined space.

20. View back towards Church Stretton showing the new housing development recently completed.

Photographs showing the incised deep cutting feature

21. The side slopes to the 3 – 4 metre deep cutting are very steep (near vertical in parts) and badly eroded where soil banks have collapsed due to undercutting caused by surface water draining from field ditches and springs along the route. Tree roots are exposed, the area is heavily shaded and very little ground vegetation covers the sparse soil banks. The ancient oak, ash and sycamore trees have a girth diameter of up to 800-900mm diameter. This important tree belt is now protected with a group tree preservation order. In order to re-use this route as a main pedestrian footpath the following work is recommended to conserve this significant feature of the site –

a. tree work to remove deadwood and carry out crown lifting where headroom is more restricted at the lower entrance off Cwms Road and general thinning to allow more daylight to penetrate the cutting.

b. raising of surface levels to between 300 – 900mm depth to install underground surface water drainage as part of a ground reinforcement solution that sits on top of the existing ground level, increases storage capacity of rainwater, allows a more controlled discharge into the existing drainage system and linked into the new SUDS system. Clean crushed stone backfill to act as a suitable footpath surfacing.

c. raising ground levels also combines to reduce the steep gradient of the cutting sides with provision of grass bank reinforcement, with soil backfill and grass seeding consisting of shade tolerant grass species.

22. This is the well worn footpath along the Public Right of Way running around the field boundary. The deep cutting is located the other side of stock fencing and is totally concealed. The cutting was the original route of the footpath. It is only through neglect and lack of management that it was easier for the footpath to be diverted along this route.

Appendix A – Photograph View Points

Photographs 3 – 6, 10 - 22.

Appendix A – Photograph View Points

Photographs 1, 2, 7, 8, 9.

Proposed Residential Development, New House Farm, Church Stretton

Transport Assessment

September 2014

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Organisation	Contact	Copies
Morris Property	Steve Pummell	1 via email

This Report is presented to Morris Property in respect of the proposed residential development at New House Farm in Church Stretton and may not be used or relied upon by any other person or by the client in relation to other matters not covered specifically by the scope of the Report.

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1 Introduction

1.1 Overview

Mouchel has been commissioned to prepare a Transport Assessment (TA) to be submitted as part of an outline planning application for a proposed development at New House Farm, Church Stretton. A plan depicting the proposed site layout is provided in **Appendix A** of this document.

In accordance with DfT guidance, the local highway officer at Shropshire Council has been consulted with in order to agree the scope of this report. The proposed site access junction is located on the A49 which is part of the Highways Agency's (HA) strategic network and the HA has therefore also been consulted on the scope of this report. The initial scoping feedback received from Shropshire Council and the HA is provided in **Appendix B** of this document.

The proposal is to construct a total of 85no. private residential properties and 16no. log cabins for holiday use on an existing parcel of agricultural land which currently forms part of New House Farm. DfT's Guidance for Transport Assessments[1] states that for residential developments in excess of 80no. dwelling houses, a TA is required in support of a planning application. As agreed during scoping discussions with Shropshire Council, a Travel Plan has also been prepared for the scheme as a separate document and should be read in conjunction with this TA.

1.2 Structure of the Report

The remainder of the report is structured as follows:

- **Section 2** of this report describes the existing conditions of the site, including an assessment of the site's accessibility by sustainable travel modes.
- **Section 3** summarises the local and national planning policies which are relevant to the development proposals.
- **Section 4** describes the development proposals.
- **Section 5** sets out the method of trip generation and assignment.
- **Section 6** assesses the expected highway impact of the proposals.
- **Section 7** provides analysis of the Personal Injury Accident record in the vicinity of the site.
- **Section 8** summarises the findings of the report, relating to the likely impact of the development proposals.

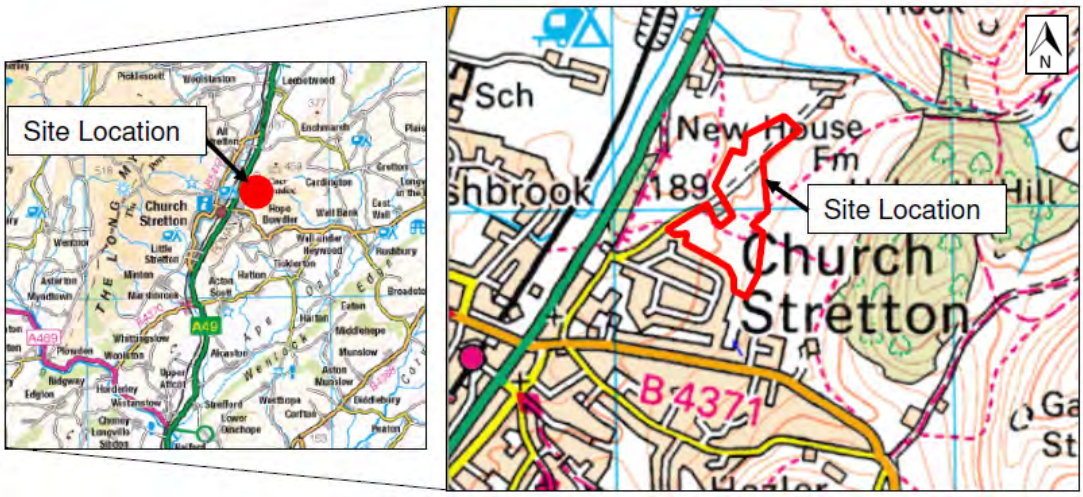
[1] DfT Guidance for Transport Assessments: *Appendix B – Indicative Thresholds for Transport Assessments*

2 Existing Conditions

2.1 Site Description and Location

The development site is currently agricultural land associated with New House Farm, located east of the A49, north east of the town of Church Stretton. The existing farm buildings, archery club and residential property known as Eastwood will be retained following the development of the site, though a revised arrangement of internal access roads will be implemented as part of the proposals. The location of the site is shown in Figure 2-1 below:

Figure 2-1 – Site Location



As shown in the figure above, the site is split into two parcels, separated by the existing stream and the residential property known as Eastwood.

A site visit was undertaken on Friday 20th June 2014 in order to assess the existing conditions, as detailed in the sections below.

2.2 Vehicular Access and Local Highway Network

Vehicular access to the site from the wider highway network is currently achievable in two locations: the A49 / New House Farm access road junction and the Cwms Lane / Watling Street North junction.

The A49 / New House Farm junction is located to the north of the development site and north west of New House Farm itself. A priority junction with the A49 provides access to an unmetalled track which leads to New House Farm, and from here, vehicles can access Cwms Lane at its northern extent.

The Cwms Lane / Helmeth Road priority junction is located to the south west of the development site and provides access to the residential area which lies north of the B4371 Sandford Avenue. To the south, Helmeth Road becomes Watling Street North, which connects to the B4371 at a priority junction. The B4371 connects to the

A49 at a signalised crossroads and provides access to Church Stretton town centre.

Cwms Lane is a sub-standard, narrow lane which runs in a south east to north west direction through the heart of the development site.

The A49 is a trunk road which forms part of the Highways Agency's (HA) network. It follows a broadly north-south alignment in the vicinity of the site and provides access to Shrewsbury to the north and to Ludlow, Leominster and Hereford to the south.

2.3 Vehicular Speed & Volume

Discussions with Shropshire Council confirmed that there are no permanent Automatic Traffic Counters (ATCs) in the vicinity of the site and so, in order to assess the existing vehicular speeds and volume along the A49, an ATC was installed from Thursday 19th June until Wednesday 25th June on the section of the A49 which is subject to the national speed limit, i.e. to the north of the Church Stretton 30mph zone. The survey data is provided in **Appendix C** of this report.

Upon receipt of the survey data, it became apparent that the traffic flows on Monday 23rd June were significantly lower than expected. This was due to a partial closure of the A49 on this day due to an incident further north near Shrewsbury. The survey data from this day was therefore excluded from the analysis to prevent the skewing of results.

The daily traffic volumes and HGV proportions are summarised by day and by direction in Table 2-1 below:

Table 2-1 - Summary of Traffic Volume Data

Day	Northbound Flow	Southbound Flow	Two-Way Flow	Two-Way HGV %
Tuesday	5196	5381	10577	18.03%
Wednesday	5318	5513	10831	18.54%
Thursday	5185	5451	10636	17.88%
Friday	5943	6651	12594	15.39%
Saturday	4665	4893	9558	7.96%
Sunday	5100	4549	9649	7.12%
Average Weekday	***5411***	***5749***	***11160***	***17.37%***
Average Day	*5235*	*5406*	*10641*	*14.42%*

As shown in Table 2-1, daily traffic flows are highest on Fridays and significantly lower on weekends. On an average weekday, there is a two-way flow of 11,160 vehicles, with a proportion of HGVs of 17.37%.

The mean and 85th percentile vehicle speeds on an average weekday are summarised by direction in Table 2-2 below:

Table 2-2 - Mean and 85th Percentile Vehicle Speeds: Average Weekday

Northbound		Southbound		Two-Way	
Mean Speed	85th Percentile Speed	Mean Speed	85th Percentile Speed	Mean Speed	85th Percentile Speed
47.2	53.8	44.3	51.5	45.8	52.7

In terms of the existing speed restrictions within the vicinity of the site, the A49 is subject to a 30mph speed restriction as it passes through the town, but is subject to the national speed limit in the vicinity of the existing New House Farm access junction. As shown in Table 2-2 above, southbound speeds are slightly lower, with this possibly attributable to vehicles slowing down on approach to the start of the 30mph speed restriction.

In terms of the other local routes, Sandford Avenue is subject to a 30mph speed restriction and Watling Street North is marked as a 20mph route.

2.4 Pedestrian Access

The two principal pedestrian routes from the site to the town centre are as follows:

- Along Cwms Lane, Watling Street North and then joining the footway on Sandford Avenue before crossing the A49 at the A49 / B4371 signalised junction. At this junction, pelican crossing facilities are in place on the southern and western arms, with dropped kerbs, tactile paving and pedestrian guardrails in place. A splitter island is located on the northern arm, providing an informal crossing point to the footways which are present on both sides of the A49 in this location; and

- Along Cwms Lane and then along the public footpath which crosses the open space to the west of Watling Street North and leads to the A49, where an informal crossing point exists. To the west of the A49, the route crosses open space and the railway line at a level crossing before joining Churchill Road. From here, Churchill Road provides access to town centre shops and to Church Stretton School and St. Lawrence Primary School on Shrewsbury Road.

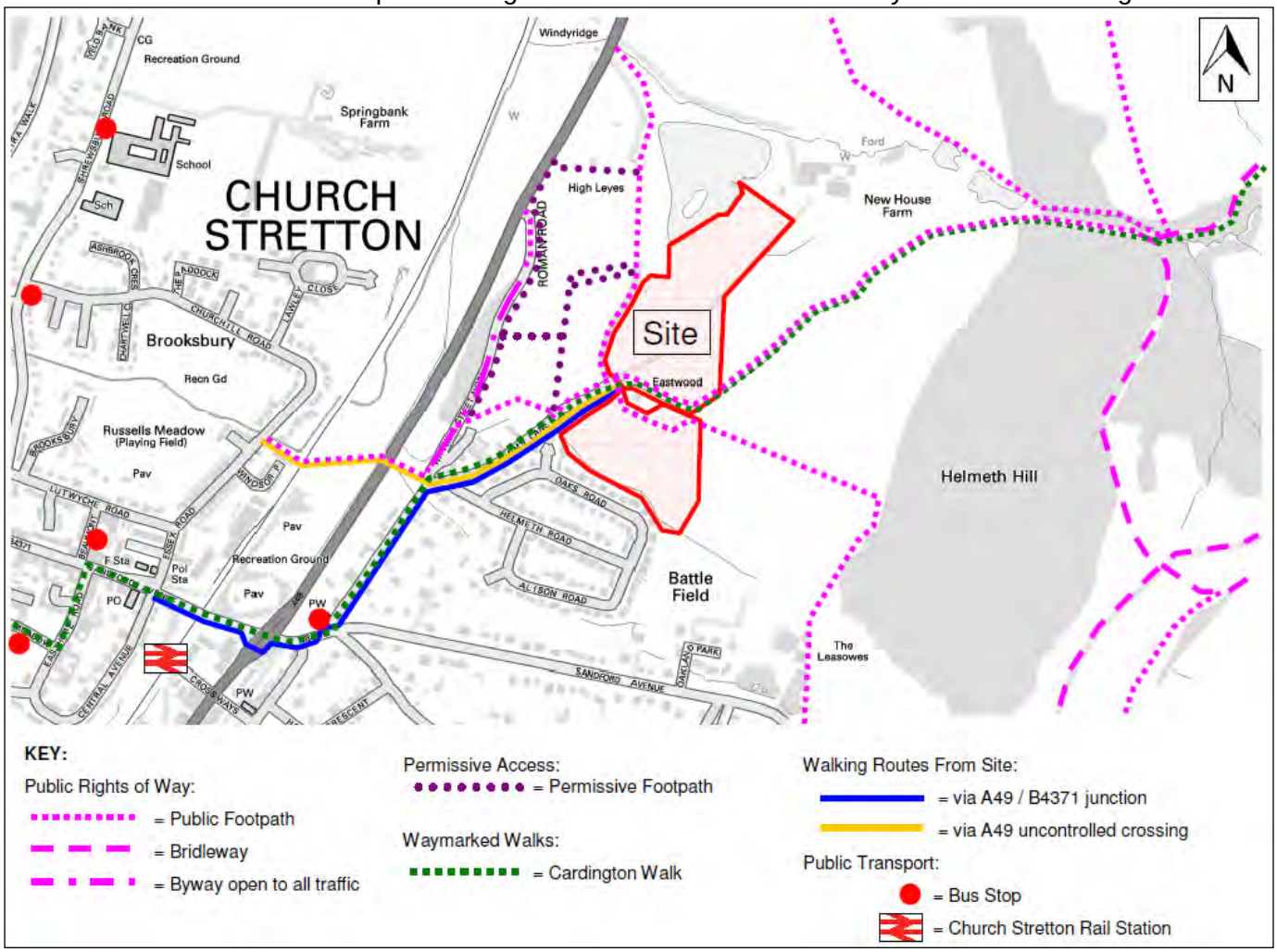
The second of the two routes above is understood to be used by pupils walking from the residential area to the east of the A49 to Church Stretton School. In order to gauge the level of usage, a pedestrian count at the A49 crossing point was undertaken from 15:00 – 16:00 on Friday 20th June 2014, to coincide with pupils travelling home from school. However, during this period, only one adult pedestrian was observed using this route. The Church Stretton School News indicates that this was the first day of the Stretton Medieval Fair, the 800th Anniversary of King John granting a charter for the Church Stretton market. It is therefore possible that the Fair may have been an attraction that delayed the children going home on the day the survey was undertaken.

On Cwms Lane, in the centre of the development site, opposite the access to the Eastwood residential property, there is an existing sign which states that Church Stretton is accessible via a 0.7 mile walk, with a duration of 20 minutes. A similar sign exists at the southern end of Cwms Lane at its junction with Helmeth Road, which states that the town is accessible via a 0.5 mile walk, with a duration of 15 minutes. It can be calculated that a walking speed of 2mph has therefore been used in these calculations. These distances equate approximately to the location of the Sandford Avenue / Beaumont Road junction within the town.

According to Ordnance Survey mapping, there are a number of public rights of way (PROWs) which pass through the site, as shown in Figure 2-2 below, which provides an overview of all walking routes, footpaths and public transport facilities in the local area:

Figure 2-2 – Walking Routes and Public Transport Facilities

The PROWs which pass through the site are used for leisure by walkers accessing



the hill walking area to the east, which includes Helmeth Hill and Caer Caradoc.

A local leisure walk known as the 'Cardington Walk' is signposted through the site with red waymarkers. This walk is one in a series of four waymarked walks around Church Stretton and is available as a leaflet from several outlets in the town centre. The route passes along Cwms Lane and to the east of the site towards Caer Caradoc and is shown on Figure 2-2 above.

There is a network of permissive footpaths to the west of the site, managed by Natural England. These paths link with the public footpaths in the area to create a number of circular walks through the numerous fields and woodland in this area. The permissive footpaths are shown on Figure 2-2 above.

2.5 Cycle Access

Regional Cycle Route 32/33 runs from Shrewsbury to Craven Arms and passes through Church Stretton on the B4370. The route is currently unsigned but appears

on Shropshire Council's Six Castles Cycleway leaflet.

Cycle parking is available in Church Stretton at the following locations:

- Rail Station (Ludlow Platform): 4 covered spaces;
- Rail Station (Shrewsbury Platform): 4 covered spaces;
- Mayfair Community Centre: 8 uncovered spaces;
- Lion Meadow Car Park: 4 uncovered spaces;
- Co-op Supermarket, Lion Meadow: 3 uncovered spaces; and
- Library, Church Street: 6 uncovered spaces.

2.6 Public Transport

Bus Services

The nearby bus stops to the site are shown on Figure 2-2 above.

The nearest bus stop to the development site is located on Sandford Avenue, adjacent to St. Milburga Church, however this stop is only served by one bus per day on Mondays to Fridays during Radbrook College term time: the 540 service from Shrewsbury to Cardington.

The bus stop on Beaumont Road in the centre of Church Stretton is within a 0.7 mile walk from the development site and is served by the 435 bus which is operated by Minsterley Motors and provides a link between Shrewsbury and Ludlow. This service connects the town with All Stretton, Leebotwood, Dorrington, Great Ryton, Condover and Bayston Hill towards Shrewsbury, and Little Stretton, Marshbrook, Bushmoor, Wistanstow, Craven Arms, Onibury and Bromfield towards Ludlow. It operates at a typical daytime frequency of one bus per hour in each direction on Monday to Friday and one bus every two hours in each direction on Saturdays. The last bus calls at the Beaumont Road stop at 18:25 on Monday to Friday and 18:11 on Saturday. The service does not operate on Sundays.

In addition, the Long Mynd and Stiperstones Shuttle bus operates on every weekend and Bank Holiday Monday from April to September. The first bus departs from the Beaumont Road stop at 10:13 and the final bus at 16:13, with an hourly frequency between these times apart from a two hour gap between 11:13 and 13:13. The service provides a link to various starting points for leisure walking and also to several local villages including Pulverbatch, Habberley, Pontesbury, Minsterley and Snailbeach.

Rail Services

The location of Church Stretton Rail Station is shown on Figure 2-2 above. The station is located within an approximate 0.5 mile walk from the south of the

development site and within a 1 mile walk from the north of the site. The station is served by the trains on the Welsh Marches Line and Heart of Wales Line. All trains serving the station are operated by Arriva Trains Wales, who also manage the station.

Services on the Welsh Marches Line provide a direct connection to Cardiff Central and Manchester Piccadilly and call at nearby towns such as Craven Arms, Ludlow, Leominster, Hereford and Shrewsbury. There is a frequency of up to one train every 30 minutes from Monday to Saturday and approximately one train every two hours on Sunday.

Services on the Heart of Wales Line provide a direct connection to Shrewsbury and a local stopping service to Swansea. There are four services per day in each direction on Monday to Saturday and two services per day in each direction on Sundays.

2.7 Summary

This section has demonstrated that the development site is accessible by a variety of travel modes and, in particular, benefits from being within a short walk of sustainable travel options such as nearby bus stops and also Church Stretton rail station, which provides direct connections to the wider area.

3 Policy Context

3.1 National Planning Policy & White Papers

National Planning Policy Framework

The National Planning Policy Framework (NPPF) was published in March 2012 and replaces a number of planning guidance documents including 'Planning Policy Guidance 13: Transport' (PPG13).

The aims of the NPPF are to simplify and combine a number of previous planning guidance documents and to put planning decision-making back into the hands of local Councils and people. The document states:

"The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied… At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking".

It gives responsibility back to local people by providing a framework within which local authorities and local people can produce their own plans to reflect the needs and priorities of their communities.

The NPPF states the importance of encouraging sustainable modes of transport which support reductions in greenhouse gas emissions and reduce congestion. The preparation of Transport Statements and Assessments is also mentioned, for developments which generate significant amounts of transport movements. Paragraph 32 states that 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 effectively limit the significant impacts of the development."

This paragraph concludes:

"Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."

The document states the importance of locating developments that generate significant movement where the need to travel will be minimised and the use of sustainable transport modes can be maximised:

"Developments should be located and designed where practical to:

- *Accommodate the efficient delivery of goods and supplies;*

- *Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;*

- *Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians;*

- *Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and*

- *Consider the needs of disabled people by all modes of transport."*

Unlike the superseded PPG13, the NPPF does not outline maximum parking standards for new development and instead places this responsibility into the hands of Local Authorities. It does state the following in terms of parking provision:

"If setting local parking standards for residential and non-residential development, local planning authorities should take into account: the accessibility of the development; the type, mix and use of 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."

Creating Growth, Cutting Carbon – Making Sustainable Local Transport Happen, White Paper
The White Paper was published in January 2011 and states its vision as:

"Our vision is for a transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities."

The White Paper sets out the changes from PPG13 to NPPF and acknowledges the further freedoms given to local authorities to adopt the right polices for their area.

3.2 Local Planning Policy

Core Strategy 2006 – 2026
Shropshire Council formally adopted the Core Strategy Development Plan Document (DPD) on 24 February 2011.

The Core Strategy sets out the strategic planning policy for Shropshire, including a 'spatial' vision and objectives. It also sets out a development strategy identifying the level of development expected to take place in Shropshire up until 2026.

The document states that the vision for the county is *"a flourishing Shropshire"* and sets out the following three priorities for achieving this vision:

1) *Enterprise and growth, with strong Market Towns and rebalanced rural settlements;*

2) *Responding to climate change and enhancing our natural and built*

environment; and

3) *Healthy, safe and confident people and communities.*

In terms of specific reference to Church Stretton, in the description of Shropshire's South Spatial Zone, the town is listed as a key settlement or service area. The A49 is referred to as the major north-south road in the area, but east-west accessibility is noted as being poor. High levels or car ownership and commuting to work are also stated.

Policy CS3 relates to Market Towns and Other Key Centres and states that Church Stretton benefits from good transport links and in terms of future development, *"will have development that balances environmental constraints with meeting local needs."* The town is specified as a district centre which will serve the needs of its immediate rural hinterlands.

Policy CS7 relates to Communications and Transport and highlights the need to meet social, economic and environmental objectives by improving accessibility, managing the need to travel, offering options for different travel needs and reducing the impacts of transport. Measures to facilitate this aim include the following:

- *"Promoting greater awareness of travel behaviour to encourage more informed choices about communication, the need to travel and alternative travel options; and*

- *Protecting and enhancing strategic and local cycling, footpath, bridleway and canal networks as local transport routes and for recreation and leisure use."*

Shropshire Local Transport Plan
Following a period of public consultation, Shropshire Council is currently finalising the Shropshire Local Transport Plan (LTP) 2011-2026. The plan covers all aspects of transport and highways, including walking, cycling, public transport, car-based travel, freight, and the management and maintenance of highways.

The Shropshire Local Transport Plan is made up of a number of separate documents:

- Provisional LTP Strategy (2011-2026). This is the core LTP document which sets out the strategic transport objectives and policies for the period 2011 to 2026;

- LTP Evidence Base documents;

- LTP Implementation Plan. This is the shorter term LTP delivery plan. It is updated annually. The 2012 plan reviews progress and sets out the projects and schemes to be delivered over the next few years; and

- A series of more detailed supplementary LTP strategies and plans to set out how the policies summarised in the LTP strategy will be pursued. Supplementary documents will be prepared and revised as necessary during the LTP period.

The LTP objectives are divided into three categories: 'Economy and growth', 'Carbon reduction and environment', and 'Healthy, safe and confident people and communities'. They can be summarised as follows:

"Economy and Growth

- *Improve connectivity and access, particularly by sustainable travel modes;*
- *Improve journey time reliability and reduce unforeseen delays; and*
- *Support growth and ensure new housing and employment areas encourage more sustainable travel behaviour.*

Carbon Reduction and Environment

- *Reduce transport related carbon emissions;*
- *Minimise the impact of transport on our local environment and communities; and*
- *Maintain the condition of the highways network.*

Healthy, safe and confident people and communities

- *Enable older, younger, disabled and other excluded people to more easily access a range of services and facilities;*
- *Encourage more travel by active modes of foot and cycle;*
- *Reduce the risk of death or injury due to transport accidents; and*
- *Help people feel safe and secure when travelling and protected from traffic in their communities.*

The proposed development supports the following policies which are set out in the LTP:

- Policy E3: Strategic Road Network Reliability Improvements;
- Policy E11: The location and design of new development;
- Policy C5: Encouraging more sustainable travel choices;

- Policy A11: Pedestrian infrastructure;
- Policy A12: Encouraging walking; and
- Policy A1: Safety schemes.

4 Development Proposals

4.1 Overview

The proposed development includes the construction of 85no. private residential properties and 16no. log cabins for holiday use. A masterplan of the proposed development can be found in **Appendix A** of this report. The schedule of accommodation is provided in Table 4-1 below:

Table 4-1 – Schedule of Accommodation

Proposed Development	Details
Private Dwelling Houses	**Northern Plot:** 2no. One Bedroom Houses 5no. Two Bedroom Houses 9no. Three Bedroom Houses 9no. Four Bedroom Houses 3no. Five Bedroom Houses SUB TOTAL: 28no. Houses **Southern Plot:** 4no. One Bedroom Houses 27no. Two Bedroom Houses 21no. Three Bedroom Houses 5no. Four Bedroom Houses SUB TOTAL: 57no. Houses **TOTAL: 85no. Houses**
Log Cabins	5no. Two Person Log Cabins 5no. Four Person Log Cabins 6no. Six Person Log Cabins **TOTAL: 16no. Log Cabins**

It is anticipated that the site will be first occupied in 2016 and fully operational by 2018. The existing New House Farm buildings, archery club and residential property known as Eastwood will be retained in their current locations, though a revised arrangement of internal access roads will be implemented as part of the proposals, described in more detail in section 4.4 below.

4.2 Pedestrian Provision

Pedestrian movements in the vicinity of the A49 / site access junction are likely to be rare, with a lack of footways and the fact that there are two defined walking routes from the development site to the town centre, as detailed below. No pedestrian movements were observed in the vicinity of the site access junction during the site visits which took place as part of the baseline data collection of the Transport

Assessment.

Notwithstanding the above, there is the possibility of very occasional pedestrian movements due to the presence of a public footpath that exits onto the A49 immediately south of the site access junction. Another footpath, which appears to be a continuation of the former path, exits the A49 to the west approximately 100m north of the junction. There is, therefore a possible need for additional pedestrian facilities at the upgraded junction and a footway connection to link the two public footpath access points. This requirement will be discussed further with the local highway authority following the submission of the planning application.

As stated in section 2.4 of this report, the two principal pedestrian routes from the site to the town centre are as follows:

- Along Cwms Lane, Watling Street North and then joining the footway on Sandford Avenue before crossing the A49 at the A49 / B4371 signalised junction. At this junction, pelican crossing facilities are in place on the southern and western arms, with dropped kerbs, tactile paving and pedestrian guardrails in place. A splitter island is located on the northern arm, providing an informal crossing point to the footways which are present on both sides of the A49 in this location; and

- Along Cwms Lane and then along the public footpath which crosses the open space to the west of Watling Street North and leads to the A49, where an informal crossing point exists. To the west of the A49, the route crosses open space and the railway line at a level crossing before joining Churchill Road. From here, Churchill Road provides access to town centre shops and to Church Stretton School and St. Lawrence Primary School on Shrewsbury Road.

As part of the proposals, Cwms Lane will be closed to general vehicular traffic in order to make this a more desirable route for pedestrians walking to the town centre. Access will be retained for cyclists, statutory undertakers and emergency service vehicles. It is proposed that access to the existing Eastwood property will be provided via the new development link road instead of Cwms Lane as at present.

Access for emergency vehicles on Cwms Lane will be maintained, for example, by using lockable bollards for which the emergency services will be provided with a key. This arrangement would also provide a secondary emergency access for the existing development at Helmeth Road, where the only means of access is via the very narrow (single track in places) Watling Street North south of Helmeth Road. We understand that there have been occasions when this access has been blocked and the emergency services have used, with permission, the existing farm tracks.

Provision of the emergency access route would potentially allow the Highway Authority to stop up that section of Watling Street North, to the north of Helmeth Road, which remains on the highway register as a publicly maintainable highway.

This arrangement therefore potentially provides a clear benefit to the existing housing estate in providing for emergency planning.

In addition, it is proposed that potential improvement works are investigated for the two routes set out above, with these forming the basis for further discussions with the local highway authority following the submission of the planning application. It is considered at this stage that these may include the following:

- Provision of a pedestrian refuge island on the A49 in the location of the existing crossing point;
- Surface improvements to the existing pedestrian route where it passes through grassed areas of open space;
- Additional measures along Cwms Lane and Watling Street North, including provision of vertical traffic calming measures such as speed humps, provision of additional white lining, provision of additional street lighting and improvements to existing signage.

As discussed in section 2.4 of this report, existing signage indicates a 0.7 mile / 20-minute walk from the centre of the site on Cwms Lane to the vicinity of the Sandford Avenue / Beaumont Road junction in the town centre. This equates to an approximate 2mph walking speed. Whilst this may be an appropriate indicator for leisure walkers using the local public footpath network, it is considered that a walking speed of 3mph is more appropriate when considering the movements of residents. This figure is in accordance with the Chartered Institute of Highways & Transportation's (CIHT) "Guidelines for providing for journeys on foot" (2000), which states:

"An average walking speed of approximately 1.4m/s can be assumed, which equates to approximately 400m in five minutes or three miles per hour."

Based on a walking speed of 3mph, the journey from the centre of the site to the town centre will take approximately 14 minutes. This was verified during the site visit of 20th June 2014.

A plan depicting a 2km buffer around the centre of the site is provided in **Appendix D** of this report and provides an indication of the potential areas that are accessible on foot from the site. The distance of 2km is referred to in the above CIHT guidance as being an acceptable walk for commuting or school visits.

4.3 Cyclist Provision

As stated in section 4.2 above, the proposals include the removal of the majority of the vehicular traffic from Cwms Lane. This would make this a more desirable route for cyclists travelling to the town centre and beyond. The potential improvement works, to be investigated further, would also result in a safer environment for cyclists

accessing the development.

A plan depicting a 5km buffer around the centre of the site is provided in **Appendix D** of this report and provides an indication of the potential areas that are accessible by bicycle from the site. The distance of 5km is broadly equal to 3 miles, which is referred to in the DfT's "Cycle Infrastructure Design" (2008) guidance as being appropriate for many utility cycle journeys.

4.4 Car User Provision

Site Access Junction

It is proposed that vehicular traffic associated with the development will access the site from the existing vehicular access to New House Farm from the A49, which will be upgraded to incorporate a new ghost island in line with DMRB standards.

Provision of a ghost island will facilitate the safer movement of vehicles accessing the site by providing an area in the centre of the carriageway where a right turning vehicle can decelerate and wait for a gap in the opposing traffic, thereby reducing the likely incidence of tail end shunts. The provision of a ghost island also reduces the likelihood of accidents caused by drivers making dangerous overtaking manoeuvres as a result of queues forming behind a vehicle travelling slowly as it waits to turn right.

According to DMRB TA 23/81, a ghost island junction is generally suitable for traffic levels on the side road of around 300 to 5000 2-way AADT movements and the trip calculations of the proposed development indicate traffic levels within this range.

A drawing depicting the proposed design solution is provided in **Appendix E** of this report. The proposal was developed by AF Macdonald & Partners and included in their Traffic Report Addendum of 2011 which was submitted as a supporting document to the SAMDev proposals at that time.

The following text is contained within the AF Macdonald Traffic Report Addendum and provides a summary of the proposed design:

- *"The proposed form of junction onto the A49 is one with a ghost island. The proposal will provide for 3.5 m wide through and turning lanes in accord with the Design Manual for Roads and Bridges TD 42/95;*

- *The full standard waiting and deceleration lengths can be provided along with the associated tapers. The widening has been provided primarily on the eastern side so as not to affect adversely the visibility splays to the property known as Windyridge on the opposite side of the road; and*

- *The design also incorporates a small waiting area for vehicles waiting to turn right into Windyridge. It would not be normal to provide a ghost island for such a lightly used access, but as there is little additional cost it appears*

sensible to make that minimum provision, albeit not with the deceleration length."

Further details of the proposed design features are summarised in the table provided in **Appendix E**, which should be read in conjunction with the design drawing.

Internal Vehicle Movements

Within the site boundary, a new section of access route will be constructed in a north-south alignment located to the west of the existing pond. Several cul-de-sacs adjoin this access route and provide access to the various residential plots.

General vehicular access to the site from Cwms Lane to the south will not be possible, with this route effectively pedestrianised to improve pedestrian accessibility. However, access will be retained for cyclists, emergency service vehicles and to the Eastwood property.

The use of this route for emergency service vehicles is beneficial to both the proposed development and also to the existing Helmeth Road housing estate located to the south of the development site. The primary route for emergency service vehicles accessing this housing estate is along the section of Watling Street North located south of Helmeth Road. However, previously, there was an additional secondary emergency route via the section of Watling Street North located north of Helmeth Road, which leads directly to the A49 but has since become overgrown and out of use.

The proposals for Cwms Lane would again provide a secondary emergency route for the existing Helmeth Road estate, with emergency vehicles able to travel through the development site and onto the A49 via the site access junction. If this route is provided, it would also be possible for the local highway authority to stop up the overgrown section of Watling Street North, to the north of Helmeth Road. The proposal therefore has a clear benefit to the existing housing estate from an emergency planning perspective.

Car Parking

Parking standards for Shropshire Council have been provided by the local highways officer. These are dated from 2004-2011. It is understood from the local highways officer that they have not been superseded, but are no longer policy, in particular they are no longer considered maxima. They are used as a starting point in determining the parking to be provided within the development of the masterplan. At detailed application stage, the numbers of spaces may vary by negotiation. The parking standards provided are summarised below.

Table 4-2 - Shropshire Maximum Parking Standards

Type of Unit / Development	Provision for Residents	Provision for Visitors	Provision for Disabled Users	Provision for Cyclists
1 bedroom house	1 space per unit	1 space per 5 units	1 space in every 10 grouped spaces	-
2 bedroom house	1.5 spaces per unit	As above	As above	-
3 & 4 bedroom house	2 spaces per unit	As above	As above	-
5+ bedroom house	3 spaces per unit	As above	As above	-

The standards do not provide a suitable reference for the log cabin element of the proposed development. In terms of the proposed private dwelling houses, based on the above parking standards, the proposed parking provision must not exceed the following:

Table 4-3 - Maximum Permitted Parking Provision

Proposed Development	Details	Maximum Provision for Residents	Maximum Provision for Visitors	Maximum Provision for Disabled Users
Private Dwelling Houses	**Northern Plot:**			
	2no. One Bedroom Houses	2no. spaces		
	5no. Two Bedroom Houses	8no. spaces		
	9no. Three Bedroom Houses	18no. spaces		
	9no. Four Bedroom Houses	18no. spaces		
	3no. Five Bedroom Houses	15no. spaces		
	SUB TOTAL: 28no. Houses	SUB TOTAL: 61no. spaces		
	Southern Plot:			
	4no. One Bedroom Houses	4no. spaces		
	27no. Two Bedroom Houses	41no. spaces		
	21no. Three Bedroom Houses	42no. spaces		
	5no. Four Bedroom Houses	10no. spaces		
	SUB TOTAL: 57no. Houses	SUB TOTAL: 97no. spaces	1 space per 5 units:	1 space in every 10 grouped spaces
	TOTAL: 85no. Houses	**TOTAL: 158no. spaces**	**TOTAL: 17no. spaces**	

The above maximum parking standards will be considered as the masterplan for the scheme develops, however the final allocation will be discussed and agreed with the local highways officer following the submission of the planning application.

4.5 Servicing

All service vehicles will access and egress the site using the proposed upgraded access junction off the A49, described in section 4.4 above.

4.6 Committed Development

There is one committed development in the vicinity of the site which will be given consideration as part of this TA, as agreed with Shropshire Council during scoping discussions. On June 24th 2014, Shropshire Council South's Planning Committee resolved to approve an outline planning application for 52 dwellings off Sandford Avenue. Further details are provided below.

- The site is located to the north of Sandford Avenue to the rear of the residential development of Oakland Park;
- The proposed development mix includes terraced, semi-detached and detached properties served by a single access point from Sandford Avenue;
- The access point is located over the existing access to the property known as 'The Leasowes';
- The existing vehicular access will be retained and upgraded; and
- The proposed dwellings are listed in the planning application form as having an unknown number of bedrooms.

A trip generation exercise has been undertaken for the above scheme and included in the impact assessments, as described in section 5.2.

5 Trip Generation and Assignment

5.1 Introduction

The purpose of this chapter is to provide details of the existing vehicle trips associated with the site, set out the methodology used in the trip generation and assignment exercise for the proposed development, provide details of committed development trips, and to set out details of the assessment years and growth factors to be used in the highway impact assessments.

5.2 Trip Generation

Existing Development Trips

The Traffic Report Addendum produced by A.F. Macdonald & Partners in 2011 states in its Table 7.1 that an estimated 172 traffic movements use the existing access on an average day. This can therefore be split into 86 'in' and 86 'out' movements. The report describes this figure as comprising users of Longmynd Archery club facilities, visitors to the lake for fishing, visitors to the lake for boating, farm traffic, visitors to the caravan site adjacent to the lake and visitors parking at the site to access the mountain biking trails.

There are no sites within the TRICS database which are similar to the existing land uses and which would therefore be suitable to examine a daily profile of arrival and departure trips. However, if an assumption is made that 10% of the total daily movements will occur in the peak hours, it is estimated that, based on the figure of 86 'in' and 86 'out' movements, there would be up to 9 arrival and 9 departure trips in the AM and PM peak hours.

During the site visit undertaken on 20th June 2014, a survey of the site access junction was undertaken during the PM peak hour of 17:00 to 18:00. As agreed with the HA during initial scoping discussions, the date of the survey is appropriate in that it coincides with the summer months. Furthermore, the survey day coincided with a settled period of dry and warm weather which would be more likely to encourage visitors to the fishing lake. The results of this are shown in Table 5-1 below:

Table 5-1- Existing Site Access Trips: PM Peak

PM Peak (17:00 - 18:00)		
IN	**OUT**	**TOTAL**
2 cars	2 cars	4 cars

At the time of the above survey being undertaken, there were a total of 7 vehicles on site associated with the fishing lake. No other vehicles were observed using the site.

Based on the information above, it is likely that the estimated 9 arriving vehicles and

9 departing vehicles in the peak hours is an overestimation, however this figure will be used in the assessment of the existing site access junction in order to ensure a robust assessment. A 50/50 directional distribution will applied, which is broadly in line with the existing northbound and southbound traffic flows in the vicinity of the junction. For robustness, the number of existing trips will therefore be rounded up to 5 PCUs arriving and departing in each direction.

Development Generated Trips - Residential

The TRICS database v7.1.1 has been interrogated for sites of similar scale and location to the proposed residential development.

The database was interrogated for private dwellings using the category 'Residential: Houses Privately Owned'. Sites from Ireland and Greater London were excluded from the search. Sites were filtered by the number of dwellings, with a range of 35 to 135 units applied in order to account for sites of similar scale to the proposed 85 units. Weekend surveys were excluded and in terms of location, only 'Edge of Town' sites were selected, as this is appropriate to the development site location. The TRICS data is provided in **Appendix F** of this report.

A search of the TRICS database using the above parameters resulted in a total of 11 sites, with an average number of dwellings of 71, which is broadly comparable with the proposed number of 85. The trip rates are summarised in Table 5-2 below:

Table 5-2 - Trip Rates: Residential Privately Owned

AM Peak (08:00 - 09:00)			PM Peak (17:00 - 18:00)		
IN	OUT	TOTAL	IN	OUT	TOTAL
0.156	0.406	0.562	0.421	0.196	0.617

The trip rates shown in Table 5-2 have been applied to the development proposals of 85no. private dwellings, with the resulting development generated trips shown in Table 5-3 below:

Table 5-3 - Development Generated Trips: Residential Privately Owned

AM Peak (08:00 - 09:00)			PM Peak (17:00 - 18:00)		
IN	OUT	TOTAL	IN	OUT	TOTAL
13	35	48	36	17	53

Development Generated Trips – Log Cabins

Interrogation of the TRICS database v7.1.1 was undertaken for sites of similar scale

and location to the proposed log cabins, however it was concluded that there is a lack of suitable sites contained within the database. It was confirmed through scoping discussions with the HA that a first principles approach should be taken, in line with the recommendations set out in the Department for Transport document 'Guidance for Transport Assessment'. The assumptions and principles which have been applied are set out below:

- The 16no. proposed log cabins comprise 5no. two person cabins, 5no. four person cabins and 6no. six person cabins;
- An estimation of one vehicle for every two people is considered to be appropriate for development of this type;
- Occupancy levels of the development will vary depending on the time of year. Summer occupancy levels are likely to be significantly higher than the winter months. Nevertheless, in order to ensure a robust assessment, it has been assumed that the log cabins will be fully occupied;
- Based on this, it is calculated that 33 vehicles will be associated with the log cabin element of the development, as shown in Table 5-4 below:

Table 5-4 - Total Vehicles Associated with Log Cabins

Size of Cabin	No. cabins	No. vehicles
Two Person	5	5
Four Person	5	10
Six Person	6	18
TOTAL	**16**	**33**

- Holiday accommodation of this type typically follows a system of a fixed change-over day for visitors. For the purposes of this calculation it is proposed that a single change-over day per week would be utilised by the accommodation, therefore ensuring a robust calculation. However, in practice the holiday accommodation may offer a variety of start dates to reduce demand for cleaning resources and cater for the needs of the visitor;
- It is assumed that 90% of visitors will stay for the full week and therefore this proportion of vehicles has been used when assessing vehicle movements during change-over day. Of the 33 vehicles associated with the log cabins, this equates to 30 vehicles;
- On change-over day, arrival and departures at the holiday accommodation

would be dependent on the time set for check-in and check-out. Typical check-in and check-out times for holiday accommodation are after 16:00 and before 10:00 respectively. The following proportions have been assumed, in order to reflect vehicle movements around these times:

Table 5-5 – Vehicle Arrival and Departure Profile: Holiday Accommodation Change-Over Day

CHECK-OUT TIMES					
07:00 – 08:00		08:00 – 09:00		09:00 – 10:00	
IN	OUT	IN	OUT	IN	OUT
-	5%	-	15%	-	80%

CHECK-IN TIMES									
15:00 – 16:00		16:00 – 17:00		17:00 – 18:00		18:00 – 19:00		19:00 – 20:00	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
5%	-	40%	-	40%	-	10%	-	5%	-

- The proportions above have been applied to the 30 vehicles calculated to access the site on change-over day, as shown below. Figures have been rounded up for robustness.

Table 5-6 - Vehicle Trips: Holiday Accommodation Change-Over Day

CHECK-OUT TIMES					
07:00 – 08:00		08:00 – 09:00		09:00 – 10:00	
IN	OUT	IN	OUT	IN	OUT
-	2	-	5	-	24

CHECK-IN TIMES									
15:00 – 16:00		16:00 – 17:00		17:00 – 18:00		18:00 – 19:00		19:00 – 20:00	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
2	-	12	-	12	-	3	-	2	-

- Due to the relatively small number of log cabins, staff vehicle movements are anticipated to be minimal and will typically consist of cleaners accessing the cabins on change-over day. In order to account for these movements, it is assumed that two staff vehicles will arrive in the AM peak hour and depart in the PM peak hour. In reality these movements may fall outside of these hours

and so this approach is considered to be robust;

- Based on the figures provided in Table 5-6 above, in addition to the 2 staff vehicles, the trip generation during the AM and PM peak hours on change-over day at the log cabins will be as follows:

Table 5-7 – Peak Hour Generated Trips: Holiday Accommodation Change-Over Day

AM Peak (08:00 - 09:00)			PM Peak (17:00 - 18:00)		
IN	OUT	TOTAL	IN	OUT	TOTAL
2	5	7	12	2	14

- On the other days of the week where visitor change-overs do not occur, vehicle movement patterns will vary and will not necessarily align with the AM and PM peak hours. Nevertheless, there is likely to be a general trend of visitors departing the site in the morning for day visits to nearby towns and departure points for leisure walking, and returning to the cabins in the evening. Multiple journeys by the same car within a single hourly period are unlikely due to the 'self-contained' nature of the accommodation. The robust trip generation calculated for the change-over days and shown in Table 5-7 is therefore considered appropriate for the purposes of this assessment.

Development Generated Trips – Total

Based on the calculations set out above, a summary of the total number of trips generated by the proposed development is provided in Table 5-8 below:

Table 5-8 - Development Generated Trips

	AM Peak (08:00 - 09:00)			PM Peak (17:00 - 18:00)		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Residential Privately Owned	13	35	48	36	17	53
Holiday Accommodation	2	5	7	12	2	14
TOTAL	**15**	**40**	**55**	**48**	**19**	**67**

It is considered that the number of pass-by trips to the proposed development will be minimal. In order to ensure a robust assessment, it is therefore assumed that all trips will be new to the local highway network.

Committed Development Trips

As discussed in detail in section 4.6, it was agreed during scoping discussions with Shropshire Council that consideration would be given to the proposed residential development for 52 dwellings off Sandford Avenue.

A Highways Report was prepared for an earlier iteration of the proposed scheme, for 40 dwellings rather than the 52 dwellings included in the final application. It has been agreed with Shropshire Council that the trip generation principles contained within the Highways Report can be used when assessing the committed development traffic, though any calculations should account for the 52 dwellings.

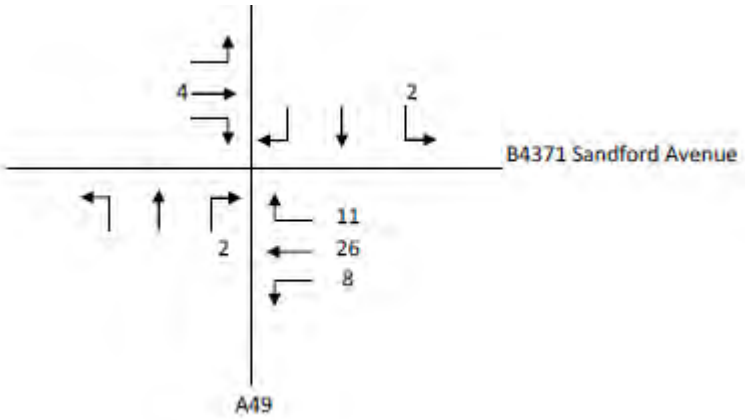
In terms of additional trips generated by the proposals, the Highways Report states that there will be 240 trips per day, based on a calculation of 6 movements per household per day and a total number of 40 households. If this calculation is extrapolated to account for 52 dwellings, this equates to 312 additional trips per day. The report also states that during the peak hour, 85% of traffic movements are associated with leaving the site and 15% with entering the site. Although not stated in the report, it is assumed that this refers to the AM peak hour and that during the PM peak, the reverse can therefore be assumed.

Based on the above, the Highways Report states that for the 40 dwellings, there will be approximately 34 additional trips in the peak hour travelling out of the site towards the A49 / B4371 Sandford Avenue junction and therefore 6 additional trips from this junction towards the site. If this calculation is extrapolated to account for the 52 dwellings, it is estimated that during the AM peak hour, there will be 45 additional westbound trips towards the A49 / B4371 Sandford Avenue junction and 8 additional eastbound trips from this junction towards the committed development site. In the PM peak hour, it is assumed that this distribution will be reversed.

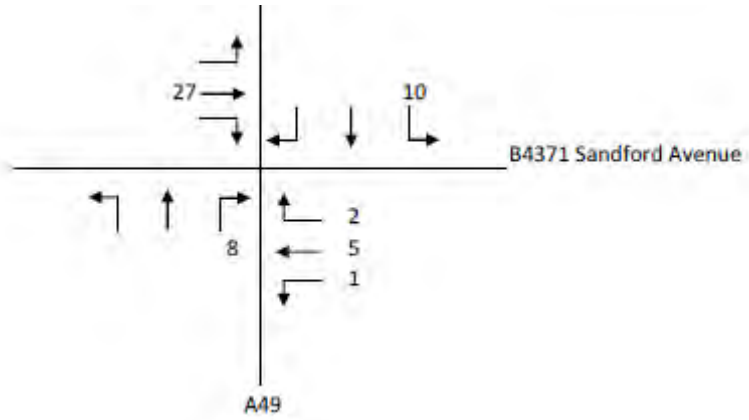
The committed development trips at the A49 / B4371 Sandford Avenue junction are presented in Figure 5-1 below, which is an extract from Diagrams 7 and 8 of **Appendix G**.

Figure 5-1 - Committed Development Trips at A49 / B4371 Sandford Avenue Junction

AM Peak Hour



PM Peak Hour



The committed development trips will be accounted for in the impact assessment exercise which is described in the following chapter.

5.3 Traffic Flow Diagrams

Traffic Flow Diagrams depicting the calculations set out in the following sections are provided in **Appendix G** of this report.

5.4 2014 Base Traffic Flows

Diagrams 1 and 2 depict the 2014 base traffic flows for the local highway network. The flows shown are taken from the classified survey at the A49 / B4371 Sandford Avenue junction, which have been converted to passenger car units (PCUs) for the purposes of the junction assessment exercise. The survey data is provided in **Appendix C** of this report.

In terms of the 'in' and 'out' movements at the site access junction, the results of the peak hour survey at the site access junction are also shown. Whilst this was undertaken during the PM peak hour, the results have also been used in the AM

peak hour assessment. This approach is considered appropriate due to the significantly low vehicle numbers surveyed: a total of two cars entering and two cars exiting the site during the hourly period.

It can be noted that a PM peak hour of 17:00 to 18:00 was calculated using the ATC data for the A49 and was therefore used for the purposes of the trip generation exercise, with the TRICS data confirming that the highest PM trip rates fall during 17:00 to 18:00. However, the classified survey data confirms that when accounting for all traffic passing through the A49 / B4371 Sandford Avenue junction, the PM peak hour at this junction falls between 16:30 and 17:30. In order to ensure the robustness of the assessments set out below, the flows for 16:30 to 17:30 have therefore been used in conjunction with the development trip generation for 17:00 to 18:00.

5.5 Directional Distribution of Trips

Development Generated Trips

Diagrams 3 and 4 depict the directional distribution which has been applied to the development generated trips. This is based on the proportions of existing traffic flows at the site access and A49 / B4371 Sandford Avenue junction.

The development generated trips shown in Table 5-8 of this report have been assigned to the directional distribution, with the results shown in Diagrams 5 and 6 for the AM and PM peak hour respectively.

Committed Development Trips

The committed development trips described in section 5.2 of this report have also been assigned to the local highway network, using the proportions of existing traffic flows at the A49 / B4371 Sandford Avenue junction. The results are presented in Diagrams 7 and 8. Due to the residential nature of the committed development, it has been assumed that any trips travelling along the A49 towards the site access will continue straight on and therefore not enter the site, as this represents an unlikely scenario.

5.6 Assessment Years and Growth Factors

It was agreed during initial scoping discussions with the HA that the assessment years should be the year of opening / first occupation, which has been confirmed as 2016 and also ten years after the date of application or the end of the relevant Local Plan period whichever is greater. In this case, the end of the Shropshire Core Strategy period is 2026 and so this assessment year will be used.

TEMPRO software was used in order to extract a growth factor from the survey year of 2014 to the assessment years of 2016 and 2026.

The following parameters were used:

- Dataset version 62: Trip end by time period;
- Area definition: Church Stretton;
- Trip purpose: All purposes;
- Time period: AM and PM peaks;
- Trip end type: Origin / Destination;
- Adjusted using NTM AF09 dataset for a rural trunk road.

Using the above parameters, the following growth factors were derived:

- A growth factor of 1.018 for the 2014 to 2016 AM Peak;
- A growth factor of 1.020 for the 2014 to 2016 PM Peak;
- A growth factor of 1.160 for the 2014 to 2026 AM Peak; and
- A growth factor of 1.177 for the 2014 to 2026 PM Peak.

5.7 Base Traffic Flows – Assessment Years

The growth factors set out above have been applied to the existing traffic flows shown in Diagrams 1 and 2. The committed development flows shown in Diagrams 7 and 8 have been added to the resulting flows in order to provide the base traffic flows for the AM and PM peak hours in the assessment years of 2016 and 2026. These are presented in Diagrams 9 to 12 respectively.

5.8 Base + Development Traffic Flows

The development generated trips shown in Diagrams 5 and 6 have been added to the base traffic flows for the AM and PM peak hours in 2016 and 2026 as shown in Diagrams 9 to 12. The resulting ‘Base + Development’ traffic flows are presented in Diagrams 13 to 16.

6 Highway Impact Assessment

6.1 Introduction

This section of the report considers the operation of the immediate local highway network to the proposed development and assesses the ability of the network to accommodate the development generated traffic calculated in chapter 5 of this report. Assessment of the impact of the development proposals has been carried out through the undertaking of percentage impact assessments at the site access junction and the A49 / B4371 Sandford Avenue junction and operational capacity assessments of the proposed site access using PICADY software.

The PICADY software program uses geometric parameters along with vehicle movement data for the junction in order to assess its performance. The output of the modelling program is a number which defines the Ratio of the Flow to its Capacity (RFC) and predicted queue lengths for individual approaches. An RFC value between 0 and 0.85 means that the junction is operating well within capacity. An RFC value between 0.85 and 1 means that the junction is still operating within capacity, but localised delays and queues may occur. An RFC value over 1 signifies that the junction will be operating above its predicted capacity.

6.2 Impact of Development on Local Highway Network

In order to assess the level of impact anticipated by the proposed development on the A49, an impact assessment has been undertaken using the ATC data and development trip generation.

The proposed development generated trips summarised in Table 5-8 have been applied proportionally by direction to the 2016 northbound and southbound base traffic flows. For this assessment, the 2016 base traffic flows are calculated from the peak hour average weekday flows from the ATC survey which have been growthed to 2016 using the growth factors set out in section 5.6. The results are provided in Table 6-1 below:

Table 6-1 - Impact of Development on A49

Time	Northbound			Southbound		
	2016 Base Traffic Flow	Additional Trips	% Impact	2016 Base Traffic Flow	Additional Trips	% Impact
08:00 – 09:00	446	28	6.2%	437	27	6.2%
17:00 – 18:00	482	33	6.9%	495	34	6.9%

As shown in the above table, the development is calculated to have a maximum 6.9% impact on traffic flows on the A49. This figure is comfortably below the figure of 10%, which is generally accepted within the industry as representing the potential daily variation in traffic flows. It is therefore considered that the impact of the development on the A49 will be minimal. However, due to the proposed upgrading of the site access junction, it is considered appropriate to assess this junction using PICADY software, as set out in section 6.3.

An impact assessment has also been undertaken at the A49 / B4371 Sandford Avenue junction. The proposed development generated trips calculated to travel to/from this junction have been applied proportionally to the 2016 base traffic flows at the junction. For this assessment, the 2016 base traffic flows are those shown in Diagrams 9 and 10 of **Appendix G**. These are based on the results of the classified survey, which have been growthed to 2016 using the growth factors set out in section 5.6 of this document for the AM and PM peak hours respectively. The 2016 base flows also include the committed development flows shown in Diagrams 7 and 8 of **Appendix G** and described in section 4.6 of this report. The results are provided in Table 6-2 below:

Table 6-2 - Impact of Development on A49/B4371 Sandford Avenue Junction

Movement	AM Peak Hour			PM Peak Hour		
	2016 Base Traffic Flow	Additional Trips	% Impact	2016 Base Traffic Flow	Additional Trips	% Impact
A49(N) left into Sandford Avenue(E)	88	4	4.6%	94	1	1.1%
A49(N) straight on to A49(S)	342	14	4.1%	479	8	1.7%
A49(N) right into Sandford Avenue(W)	41	2	4.9%	70	1	1.4%
Sandford Avenue(W) left into A49(N)	72	1	1.4%	102	5	4.9%
A49(S) straight on to A49(N)	350	5	1.4%	426	19	4.5%
Sandford Avenue(E) right into A49(N)	79	1	1.3%	42	2	4.8%

As shown in the table above, the development is calculated to have a maximum 4.9% impact on the A49 / B4371 junction. This figure is significantly lower than the 10% threshold which is generally accepted in the industry as representing the daily variation in traffic flows. Furthermore, it is shown from the TEMPRO growth factors provided in section 1.7 that local background traffic is forecast to grow by between 16% and 17.7% between 2014 and 2026 and the percentage impact of the development is significantly lower than this level of growth. It is therefore considered that the impact of the development on this junction will be negligible.

The results of the impact assessment presented above were provided to the HA during the scoping period of this report, and it was agreed that due to the minimal impact of the development, detailed junction modelling of the A49 / B4371 Sandford Avenue junction is not required. It was agreed that detailed junction modelling is only required for the site access junction, as set out in the following section.

6.3 Site Access Junction

Base Traffic Flows

Using the 2014 base traffic flows presented in Diagrams 1 and 2 for the AM and PM peak hours respectively, the 2016 base traffic flows presented in Diagrams 9 and 10 and the 2026 base traffic flows presented in Diagrams 11 and 12, PICADY assessments have been undertaken for the site access junction. The existing junction layout has been used as the basis for all of the base assessments. A summary of the results is provided in Table 6-3 below, with the full outputs from the PICADY models provided in **Appendix H** of this report.

Table 6-3 - Site Access Junction - Base Traffic PICADY Results

	2014 Base				2016 Base				2026 Base			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
Movement	**RFC**	**Queue**	**RFC**	**Queue**	**RFC**	**Queue**	**RFC**	**Queue**	**RFC**	**Queue**	**RFC**	**Queue**
Site access – left onto A49 South	0.010	0	0.010	0	0.010	0	0.010	0	0.012	0	0.013	0
Site access – right onto A49 North	0.016	0	0.019	0	0.016	0	0.019	0	0.021	0	0.027	0
A49 South right to site access / A49 North	0.009	0	0.010	0	0.009	0	0.010	0	0.012	0	0.013	0

It is clear from the results of the assessment presented in the table above, that the existing site access junction operates well within its capacity, with RFC values remaining comfortably below the threshold of delays occurring and no queues occurring.

'Base + Development' Traffic Flows

Using the 2016 base + development traffic flows presented in Diagrams 13 and 14 for the AM and PM peak hours respectively, and the 2026 base + development traffic flows presented in Diagrams 15 and 16, PICADY assessments have been undertaken for the site access junction. The proposed upgraded junction layout has been used for the base + development assessments A summary of the results is provided in Table 6-4 below, with the full outputs from the PICADY models provided in **Appendix H** of this report.

Table 6-4 - Site Access Junction - Base + Development Traffic PICADY Results

	2016 Base + Development				2026 Base + Development			
	AM Peak		PM Peak		AM Peak		PM Peak	
Movement	**RFC**	**Queue**	**RFC**	**Queue**	**RFC**	**Queue**	**RFC**	**Queue**
Site access – left onto A49 South	0.048	0	0.031	0	0.052	0	0.035	0
Site access – right onto A49 North	0.080	0	0.056	0	0.091	0	0.070	0
A49 South right to site access / A49 North	0.020	0	0.055	0	0.022	0	0.060	0

It is clear from the results of the assessment presented in the table above, that the proposed site access junction operates well within its capacity, with RFC values remaining comfortably below the threshold of delays occurring and no queues occurring.

7 Accident Analysis

7.1 Overview

Personal Injury Accident (P.I.A.) data for the latest five-year period on the A49 in the vicinity of the site was obtained from the HA. The five-year period covered 1st January 2008 to 31st December 2012. The data is provided in **Appendix I** of this report, including a plot of the accident locations.

In the survey period, a total of five accidents occurred within the study area, resulting in eight casualties in total. This equates to an average of one accident and fewer than two casualties per year.

Of the five accidents that occurred, one of these was classified as fatal in terms of severity. One was classified as serious and the remaining three accidents were classified as slight.

Of the 8 casualties that occurred, in terms of severity, one of these was fatal, three were serious and the remaining four were slight. Five of the casualties were the driver of the vehicle and three were passengers.

Three of the accidents occurred during daylight hours, with the remaining two accidents occurring after dark. Four of the accidents occurred during dry conditions, with the remaining accident occurring during a period where the road was flooded.

None of the five accidents which have occurred involved either a pedestrian, cyclist or anyone of school age.

7.2 Summary of Accidents

A summary of the five accidents to have occurred within the latest five year period in the vicinity of the site is provided in Table 7-1 below.

Table 7-1 - Accident Summary

Accident Reference	Date and Time	Severity	Conditions	No. vehicles	No. casualties	Details	Contributory Factors
11F101718	Sunday 01/05/2011 12:00	Serious	Fine weather, dry surface, daylight	2	1	Vehicle 1 travelling north was committed to a right hand bend into New House Farm. Vehicle 2 was travelling north and committed to a considered safe overtake of vehicle 3. It is suspected that vehicle 2 and 3 shielded the view of vehicle 1 which had slowed and was indicating. Vehicle 1 turned right into the path of vehicle 2.	Poor turn or manoeuvre (Driver/Rider - Error), Failed to look properly (Driver/Rider - Error), Failed to judge other person's path/speed (Driver/Rider - Error)
09F904152	Friday 31/07/2009 21:53	Slight	Rainy weather, dry surface, dark	2	2	The driver of vehicle 1 states that they were travelling along the A49 when vehicle 2 has braked to avoid a sheep in the road. The driver of vehicle 1 has failed to stop and has collided with the rear of vehicle 2 causing damage and injury.	Animal or object in carriageway (Road Environment Contrib), Slippery road due to weather (Road Environment Contrib), Following too close (Drive/Rider - Injudicious)
08FA00135	Sunday 09/11/2008 19:20	Slight	Rainy weather, flooded surface, dark	1	1	The driver of vehicle 1 failed to see that the road was flooded and lost control on impacting with the water. Vehicle 1 left the carriageway to the offside and entered the verge.	Impaired by alcohol (Driver/Rider - Impairment), Loss of control (Driver/Rider - Error)
12F200469	Monday 30/01/2012 10:37	Fatal	Fine weather, dry surface, light	1	3	Witness evidence suggests that the vehicle has veered to its offside across the opposing carriageway and beyond, onto a flat grass verge and into a tree, leaving the field beyond. Substantial impact to front offside.	Loss of control (Driver/Rider - Error), Fatigue (Driver/Rider - Impairment), Illness or disability, mental or physical (Driver/Rider - Impairment)
08FA87986	Saturday 09/02/2008 15:12	Slight	Fine weather, dry surface, light	2	1	Both vehicles were travelling in the same direction, on approach to the junction. Vehicle 2 moves out into the right filter lane, vehicle 1 (motorcycle) begins to overtake, the rider then brakes excessively and loses control, falling off the bike which then collides with vehicle 2.	Failed to judge other person's path/speed (Driver/Rider - Error), Road layout e.g. bend, hill or narrow (Road Environment Contrib), Poor turn or manoeuvre (Driver/Rider - Error), Loss of control (Driver/Rider - Error)

7.3 Conclusions

The number of accidents that has occurred over the latest five year period is not considered to be excessive for the number of vehicle movements in this location. A number of different factors were involved in the causes of the accidents including several instances of driver error. It is determined that there are no specific causational factors within the local highway or that the existing design of the highways was a material factor in these accidents having occurred. Furthermore, it has been demonstrated that the development will not introduce significant changes to the existing traffic flows.

Notwithstanding the above, the proposed provision of a ghost island facility at the site access junction will provide a safer environment for right turning vehicles to access the site and it is possible that with a ghost island facility in place, accident 11F101718 may have been avoided.

8 Summary and Conclusion

8.1 Summary

Mouchel has been commissioned to prepare a TA to be submitted as part of an outline planning application for a proposed development at New House Farm, Church Stretton. The proposal is to construct a total of 85no. private residential properties and 16no. log cabins for holiday use on an existing parcel of agricultural land which currently forms part of New House Farm.

The development site is currently agricultural land associated with New House Farm, located east of the A49, north east of the town of Church Stretton. The existing farm buildings, archery club and residential property known as Eastwood will be retained following the development of the site, though a revised arrangement of internal access roads will be implemented as part of the proposals. The site is split into two parcels, separated by the existing stream and the residential property known as Eastwood.

The whole of the built up area of Church Stretton falls within 2km from the proposal site, with the town centre within a 15 minute walk from the centre of the site. It is therefore considered there is a high potential for walking and cycling trips to be undertaken between the proposed site and the town centre.

Assessment of the impact of the development proposals has been carried out through the undertaking of both link impact assessments and junction operational capacity assessments using PICADY software of the existing and proposed site access junctions on the A649. The predicted trip generation of the proposed residential development on Sandford Avenue has been included as part of the assessments. No link or capacity issues have been identified as part of the assessment of the development related traffic increases.

The number of accidents that has occurred over the latest five year period is not considered to be excessive for the number of vehicle movements in this location. A number of different factors were involved in the causes of the accidents including several instances of driver error. It is determined that there are no specific causational factors within the local highway or that the existing design of the highways was a material factor in these accidents having occurred. Furthermore, it has been demonstrated that the development will not introduce significant changes to the existing traffic flows. Notwithstanding the above, the proposed provision of a ghost island facility at the site access junction will provide a safer environment for right turning vehicles to access the site.

Prior to the residential development being occupied, a Travel Plan would be developed and agreed in conjunction with the Local Authority. Travel Plan measures would generally be secured by means of a planning condition requiring the Travel Plan to be agreed with the local planning authority and implemented prior to the

development being brought into use.

8.2 Conclusions

It is considered that the proposals are consistent with the principles of NPPF:

- the nature and location of the development provides opportunities for sustainable travel modes to be used;
- a draft Travel Plan has been developed with the aims of raising awareness of sustainable travel options, reducing the reliance on single occupancy car use, reducing the need to travel and thus potentially improving local air quality, minimising noise pollution and improving road safety through reduced vehicle movements;
- a non-motorised user (NMU) Audit Context Report has been prepared for the scheme, to demonstrate that consideration has been given to these users in the development of the design. This report is provided in **Appendix J**;
- suitable access can be achieved for vehicular traffic without the need for major transport infrastructure; and
- the residual cumulative impacts of the development are negligible.

We have used our reasonable endeavours to provide information that is correct and accurate and have discussed above the reasonable conclusions that can be reached on the basis of the information available. Having issued the range of conclusions it is for the client to decide how to proceed with this project.

Appendix


Pond
Archery Club
To Farm
possible entrance
to High Leyes
MORRIS
PROPERTY
LSP
PLANNING &
DEVELOPMENT
architects
NEW HOUSE FARM, CHURCH STRETTON, MASTERPLAN
Scale 1:1250 @ A1
Revision E

From: Gemma Lawley [mailto:gemma.lawley@shropshire.gov.uk]
Sent: 31 July 2014 15:06
To: [redacted]
Subject: RE: Proposed Residential Development, Church Stretton

[redacted]

Apologises for the delayed response to your email, I can confirm that the scoping document is acceptable in principle, and I have very few comments;

The residential Trip rates for the morning peak are acceptable. The Trip rates for the P.M peak seems a little low but the overall figure is around the right area, so is acceptable.

It could be suggested that on the weekly change-over day the evening peak flows might be higher as new residents go to the supermarket / local pub/restaurant, but it is not anticipated that this would be a significant amount, adding perhaps 3-4 trips in the PM peak, it might be worth making reference within the T.A, but not essential.

In terms of the permitted development the highways report for the development off Sandford Avenue (14/01173/OUT) was written a while before the final submission, and based on the assumption that the application site would be for 40 dwellings, not 52, it was not updated prior to the submission of the application. When the application was submitted, it was for 52 dwellings, however, concerns were raised and the number of dwellings was reduced to 34.

Despite the above, when the application was heard by Shropshire Council's South Planning Committee on 24th June 2014 the Town Council made representation to the Committee meeting and the resolution was to grant outline permission for up to 52 dwellings to meet local housing supply needs. I am unsure at this time if formal planning permission has been granted but the committee has resolved to approve the application.

Therefore, the assumptions you have made are acceptable, the general principles of the highways report for the Sandford Avenue application in terms of trip generation can be used, but should be calculated on the basis of 52 dwellings not 40.

Hope that makes sense, any queries, please feel free to contact me.

Kind Regards

Gemma

Gemma Lawley
Developing Highways – Area Manager South
Shropshire Council

From: Thomas, Patrick [mailto:Patrick.Thomas@highways.gsi.gov.uk]
Sent: 31 July 2014 10:09
To: [redacted]
Subject: Proposed Residential Development, Church Stretton

Dear [redacted]

Thank you for submitting by email the Scoping Document for the proposed development at New House Farm, Church Stretton. We have completed our review of the document and offer the following comments:

- Details of relevant policy, site location and existing uses, sustainable transport and accident data should be included within the Transport Assessment.

- The trip generation methods and figures for the residential and holiday lets are found to be acceptable.

- Clarification is needed as to the method used to distribute the trips expected from the committed development.

- Details of the described committed development need to be clarified with Shropshire Council.

- TEMPRO growth factors have been checked and agreed.

- An assessment of the access junction using PICADY software is required.

- The 2016 base traffic flow survey data in table 1-13 needs to be checked and clarified.

- It is considered that a junction assessment for the Sandford Avenue/A49 junction is not required due to the low number of trips predicted to route through this junction.

I trust that you find these comments useful going forward.

Regards
Patrick

Patrick Thomas, Asset Manager
Highways Agency | The Cube | 199 Wharfside Street | Birmingham | B1 1RN
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Web: http://www.highways.gov.uk
GTN: 6189 8196

From: Thomas, Patrick [mailto:Patrick.Thomas@highways.gsi.gov.uk]
Sent: 17 June 2014 14:09
To: [redacted]
Cc: [redacted]
Subject: RE: Proposed Residential Development, Church Stretton

Dear [redacted],

Further to our earlier telephone conversation and your email of 5th June, we have completed our review of the proposed scope and offer the following comments. Please note that our comments are based on previous discussions and the scoping questionnaire submitted to Shropshire Council.

Development Proposals
It is stated in the scoping questionnaire that the development will consist of 85 dwellings and also 30 log cabins, which is assumed to be for holiday let. The site is located off the A49 just to the north of Church Stretton.

Predicted Traffic Generation
It is stated in the scoping questionnaire that the development is likely to generate around 50 two-way trips during AM and PM peak hours, although no evidence has been provided. The standard tool for deriving potential traffic generation is the TRICS database, and it is recommended that this is utilised for the residential element of the proposals. It is agreed that there are no comparable sites available within the TRICS database for the 'Log Cabin' element. It is therefore suggested that 'First Principles' are used if possible utilising any available data to predict the likely traffic generation, or alternatively a review and traffic survey of any similar sites.

It is requested that the trip generation approach and estimates are detailed in a formal scoping report to be submitted and agreed with the HA.

Existing Site Uses
The existing uses on site include New House farm buildings, an Archery Club and a residential property named Eastland. It is stated that all of these uses are to be retained. In terms of the traffic generation of the existing uses, it is recommended that a traffic survey is undertaken at the site access, to determine this. As per our previous response, this may be appropriate in the summer months to gain a more realistic view of the number of vehicles utilising this access.

Access Proposals
It is stated that the existing access off the A49 is to be retained and improved to include a 'Ghost Island' right turn formation. As per our previous response, we do not offer any objections to the potential upgrade of this access subject to meeting safety, capacity, deliverability and design standards.

Base Traffic Conditions
It is stated that ATC data is available along the A49 at the site access point, which was undertaken in December 2010. It should be noted that December

is not a neutral month for undertaking traffic surveys and therefore this may provide an unrealistic view of existing traffic conditions along the A49. Furthermore, the assessment should include recent counts (usually within the last three years), as stated in the DfT Transport Assessment Guidelines, and therefore this data may be too old for use. In the absence of any other data being available, It is therefore recommended that fully classified traffic surveys are undertaken at the site access and at other junctions to be assessed (see capacity assessments below).

It is stated that 85th percentile speed data is available, and this is appropriate for use as a basis for access design and visibility requirements.

Predicted Traffic Growth

As stated, permanent site ATC data may be appropriate to derive local growth factors, depending on how long these have been in place. It may be appropriate to compare these with locally derived TEMPRO growth factors. The methodology and proposed growth factors are to be agreed with the local authority and HA prior to assessment being undertaken.

Capacity Assessments

As a minimum, the HA would require assessment of the site access junction (both existing and proposed) and the A49/Sandford Avenue junction. Other junction capacity assessments will be determined following agreement of the trip generation and distribution from the development site.

Assessment Years

As per Department for Transport (DfT) Circular 02/2013, the HA would require assessment for the year of opening (first occupation) and ten years after the date of application or the end of the relevant Local Plan period whichever is greater. It is stated that the site will be fully occupied in 2018, however the HA will require assessment on first occupation which is likely to be earlier.

Recommendations

We recommended that a formal Scoping Report is produced and submitted for review to the local authority and HA, in order to gain agreement on the proposed methodology for assessment. This should take into account all of the above.

I trust you find this a sufficient initial response. Please let me know if you have further queries.

Regards
Patrick

Patrick Thomas, Asset Manager
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SCOPING STUDY FOR: Proposed Residential Development at New House Farm, Church Stretton **CLIENT: Morris Properties**

LOCAL AUTHORITIES: Shropshire County Council, Highways Agency

Ref	Item	Requirements	Comments
1	Level of planning approval sought? e.g. outline, full.	Outline	
2	Size and description of development proposals	85 private residential properties and 30 log cabins for holiday use – see attached draft plans.	
3	Description of existing land uses, existing trip distribution	Agricultural land within existing New House Farm. The existing farm buildings, archery club and residential property known as Eastwood will be retained in their current locations, although a revised arrangement of internal access roads will be required.	
4	Does the development involve the relocation of an existing use?	No.	
5	How are existing land use flows going to dealt with?	N/A – remain as at present.	
6	Are traffic surveys of the existing conditions available or required?	Continuous ATC data collected for seven days in December 2010 on A49 at site frontage, which includes both classified volumetric data and average/85th percentile speed data.	
7	Are further traffic surveys required?	To be confirmed with highways officer.	Presumption made that Highways Agency will ask for assessment of A49/Sandford Avenue Junction and A49/B4370. You may also want to look at junction of Sandford Avenue/Easthorpe Road and Sandford Avenue/High Street.
8	Details of any other developments to be taken into account.	Planning To be confirmed with highway officer.	Planning application has been received for 52 dwellings off Sandford Avenue, but permission has not yet been granted. http://planningpa.shropshire.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=N2LH3ETDIOG00

9	Details of any adjacent highway improvement proposals by others	None known – to be confirmed with highway officer.	None that I am aware of.
10	When are the critical periods for assessments?	Weekday morning and evening peak periods.	
11	When would the site be fully operational?	2018	
12	What are the assessment years?	2018	
13	Traffic growth factors?	To be confirmed with highway officer. Do DCC have Permanent ATC data sites with which to derive local factors?.	Shropshire Council have ATC Data available - Please contact Jenny Perry for specific ATC Data. Jenny.perry@shropshire.gov.uk
13	What will be the trip generation for the proposals?	Around 50 two-way trips during morning and evening weekday peak hours, which equates to around a 5% impact on the A49 passing traffic. There are not many comparable TRICS sites for the log cabin element.	
14	Would traffic from adjacent sites be attracted to the site? Pass-by traffic?	Not at a significant level therefore zero pass-by will be assumed to ensure a robust assessment.	
15	What is the assumed trip distribution?	IN proportion with existing traffic flows passing the site.	
16	What is the extent of the study area to be considered?	Proposed access junction on A49.	
17	Capacity tests required for the proposed and existing junctions	Yes for proposed access junction.	
18	Are adjacent junctions or links likely to become	No.	

	overloaded?		
19	Is a new or modified highway access likely?	Yes. Improve existing farm access on A49 to meet DMRB standards and include ghost island right turn lane.	
20	What are the visibility requirements? Are those requirements met?	DMRB requirements for 100 kph design speed.	
21	What level of car parking is required?	To be confirmed with highway officer.	I've attached South Shropshire District Councils guidance to this email, this is awaiting updating.
22	Are special provisions required for cyclists, pedestrians, he disabled or public transport?	Cycle and pedestrian routes to/from and across the site will be considered within the TA. A formal pedestrian crossing facility may be desirable to tie in with the footpath to the west of the A49 across the level crossing to the local school.	
23	Will the proposals have an impact on road safety?	A review of accident records suggests that there are no specific issues. The creation of a ghost island junction at the proposed site access is anticipated to reduce the likelihood of rear-end shunt type accidents, combined with formal pedestrian crossing facilities on the A49 is anticipated that the development would have a positive impact overall.	
24	Do the proposals comply with relevant national policy?	Yes	
25	Are there any further transport related reports required? e.g. Travel Plans, Car Park Management Plans	To be confirmed with highways officer.	Travel Plan

26	Are there any other special circumstances relevant to this proposal?	A49 is a trunk road. Written agreement in principle to the location and form of the site access has been received from the HA.	

Church Stretton, Shropshire

Report Id 386/14-01
Site Name Site 1 of 1
Description A49, 300m north of B4371 Sandford Avenue
Direction Southbound

Thursday 19 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	23	10	5	5	3	0	1	15	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	3	9	4	2	1	1	56.4	48.6	9.5
0100 - 0200	13	4	2	4	3	0	0	7	1	3	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	6	1	1	1	0	1	50.8	44.2	10.2
0200 - 0300	12	2	3	4	3	0	0	10	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	1	2	2	1	3	65.3	54.2	12.5
0300 - 0400	9	1	2	3	3	0	1	3	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	1	0	2	3	1	-	56.5	8.9
0400 - 0500	16	0	5	3	8	0	0	6	0	3	0	0	0	0	5	2	0	0	0	0	0	0	0	1	0	1	1	6	2	3	2	64.0	54.7	9.2
0500 - 0600	56	17	7	19	13	0	0	24	0	9	1	0	0	6	6	10	0	0	0	0	0	0	0	1	5	10	14	9	8	3	6	61.7	51.4	10.2
0600 - 0700	126	17	36	38	35	0	1	75	1	19	2	2	0	2	11	12	0	1	0	0	0	0	0	3	14	28	33	22	9	6	11	59.1	49.3	9.4
0700 - 0800	320	74	75	78	93	1	2	233	3	51	1	6	1	4	5	13	0	0	0	0	0	3	20	32	81	85	52	29	10	6	2	49.4	41.9	8.0
0800 - 0900	452	116	115	103	118	0	1	346	11	66	2	3	5	1	8	9	0	0	0	0	0	2	15	64	94	149	71	33	16	5	3	48.8	42.0	7.4
0900 - 1000	364	93	90	88	93	0	0	271	6	63	3	2	1	3	10	5	0	0	0	0	0	13	20	50	84	96	70	22	7	2	0	47.6	40.4	7.7
1000 - 1100	356	81	88	98	89	0	1	275	8	49	2	1	0	2	3	14	0	1	0	0	0	0	0	24	106	143	58	19	4	1	1	46.8	41.7	5.3
1100 - 1200	350	77	89	91	93	0	7	263	5	47	2	1	0	4	8	13	0	0	0	0	0	0	10	48	85	98	72	29	2	3	3	48.1	41.8	7.0
1200 - 1300	327	89	78	85	75	0	7	245	10	35	3	0	0	5	11	9	1	1	0	0	0	0	17	49	95	85	64	9	3	2	3	47.6	40.8	7.3
1300 - 1400	368	92	101	75	100	0	0	286	15	41	4	1	0	2	11	5	0	3	0	0	0	11	49	73	78	72	54	18	8	0	5	47.6	38.8	8.6
1400 - 1500	374	92	81	96	105	0	5	303	4	40	1	0	0	2	6	11	0	2	0	0	0	1	32	55	77	95	75	21	14	3	1	47.9	41.0	7.6
1500 - 1600	381	98	99	100	84	0	2	319	5	35	1	1	1	1	6	9	0	1	0	0	0	2	16	62	102	98	66	26	4	4	1	47.4	40.9	7.3
1600 - 1700	505	145	123	127	110	1	2	421	11	57	2	0	0	2	6	3	0	0	3	9	18	24	44	77	127	99	63	33	4	2	2	46.3	37.3	9.7
1700 - 1800	432	103	123	111	95	1	3	382	6	23	1	1	0	0	1	13	1	0	0	1	0	7	18	41	102	114	88	54	4	2	1	49.7	41.9	7.3
1800 - 1900	368	106	104	69	89	1	1	330	6	17	0	1	0	3	3	6	0	0	0	0	0	5	13	46	81	97	75	41	6	3	1	49.7	42.0	7.3
1900 - 2000	226	62	61	54	49	0	2	192	7	16	0	0	1	0	2	6	0	0	0	0	0	0	0	20	30	57	49	50	9	6	5	53.2	45.8	8.1
2000 - 2100	153	32	40	49	32	0	4	132	2	4	0	4	0	1	4	2	0	0	0	0	0	0	1	9	29	26	31	29	15	4	9	56.6	47.5	10.2
2100 - 2200	98	28	31	17	22	1	0	78	5	5	0	4	0	1	3	1	0	0	0	0	1	0	1	5	4	22	40	14	9	2	0	53.5	46.6	7.1
2200 - 2300	76	26	30	8	12	0	9	60	0	3	0	1	1	0	1	1	0	0	0	0	0	0	0	3	15	19	16	4	10	3	6	57.7	47.7	10.4
2300 - 0000	46	10	12	15	9	0	1	35	0	2	1	0	0	0	7	0	0	0	0	0	0	0	0	5	8	17	6	3	4	2	1	54.8	44.8	8.5
0700 - 1900	**4597**	**1166**	**1166**	**1121**	**1144**	**4**	**31**	**3674**	**90**	**524**	**22**	**17**	**8**	**29**	**78**	**110**	**2**	**8**	**3**	**10**	**18**	**68**	**254**	**621**	**1112**	**1231**	**808**	**334**	**82**	**33**	**23**	**48.1**	**40.8**	**7.8**
0600 - 2200	**5200**	**1305**	**1334**	**1279**	**1282**	**5**	**38**	**4151**	**105**	**568**	**24**	**27**	**9**	**33**	**98**	**131**	**2**	**9**	**3**	**10**	**19**	**68**	**256**	**658**	**1189**	**1364**	**961**	**449**	**124**	**51**	**48**	**49.0**	**41.5**	**8.2**
0600 - 0000	**5322**	**1341**	**1376**	**1302**	**1303**	**5**	**48**	**4246**	**105**	**573**	**25**	**28**	**10**	**33**	**106**	**132**	**2**	**9**	**3**	**10**	**19**	**68**	**256**	**666**	**1212**	**1400**	**983**	**456**	**138**	**56**	**55**	**49.2**	**41.6**	**8.3**
0000 - 0000	**5451**	**1375**	**1400**	**1340**	**1336**	**5**	**50**	**4311**	**106**	**598**	**26**	**28**	**10**	**40**	**121**	**145**	**2**	**9**	**3**	**10**	**19**	**68**	**257**	**670**	**1223**	**1422**	**1010**	**478**	**155**	**67**	**69**	**49.4**	**41.9**	**8.4**

Friday 20 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	21	5	6	6	4	0	1	13	0	0	0	0	0	0	6	1	0	0	0	0	0	0	0	4	3	4	5	4	1	0	57.9	48.3	8.3
0100 - 0200	11	5	3	1	2	0	0	8	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	2	2	0	4	1	2	0	55.3	49.6	8.3
0200 - 0300	12	3	6	2	1	0	0	4	0	1	0	0	0	0	6	1	0	0	0	0	0	0	0	1	2	3	1	3	1	1	0	53.5	46.5	8.8
0300 - 0400	12	4	1	4	3	0	0	3	0	4	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	3	2	4	1	2	0	55.3	50.6	7.3
0400 - 0500	16	3	4	3	6	0	0	7	0	3	0	0	0	0	5	1	0	0	0	0	0	0	0	0	1	4	4	2	1	2	2	63.1	53.6	14.4
0500 - 0600	57	8	13	22	14	0	1	29	0	9	1	1	0	3	4	9	0	0	0	0	0	0	0	2	6	10	14	14	3	6	2	59.3	49.0	8.5
0600 - 0700	132	17	38	20	57	0	2	73	1	29	2	2	0	2	10	10	0	1	0	0	0	0	2	11	22	35	15	21	12	9	5	57.5	46.7	10.2
0700 - 0800	287	46	77	68	96	0	1	221	1	35	3	1	1	1	7	15	1	0	0	0	0	5	22	33	64	72	63	10	12	3	3	47.9	41.2	8.3
0800 - 0900	421	80	108	111	122	0	2	329	8	55	1	4	1	4	6	11	0	0	0	0	0	4	22	69	130	114	53	21	5	2	1	46.3	39.8	6.5
0900 - 1000	342	94	61	95	92	2	4	249	4	59	5	2	1	4	3	8	0	1	0	1	0	0	11	50	92	122	47	15	2	1	1	45.9	40.5	6.6
1000 - 1100	376	95	87	109	85	0	4	298	11	44	1	3	1	2	3	7	1	1	0	0	3	0	11	33	83	149	63	25	8	1	0	47.0	41.6	6.3
1100 - 1200	411	108	89	104	110	1	0	333	10	41	0	0	1	5	11	8	0	1	0	1	11	12	19	69	106	111	54	20	6	1	1	46.5	39.2	8.0
1200 - 1300	440	108	119	103	110	0	4	364	11	36	0	2	1	3	10	8	0	1	0	1	0	2	25	69	129	135	52	22	5	0	0	45.4	39.8	6.3
1300 - 1400	514	114	117	135	148	1	3	433	13	38	2	3	2	3	5	10	0	1	2	6	9	28	20	61	122	131	88	33	11	2	1	47.4	39.4	9.1
1400 - 1500	525	137	97	135	156	0	6	412	16	65	4	2	3	8	5	4	0	0	0	7	10	23	41	117	119	122	61	13	7	2	3	45.2	37.5	8.5
1500 - 1600	491	109	128	129	125	2	7	397	13	45	1	1	2	7	5	11	0	0	0	1	5	10	28	98	145	111	60	23	8	1	1	46.3	39.0	7.5
1600 - 1700	584	129	150	153	152	0	4	498	13	53	1	1	2	1	4	7	0	0	0	4	24	21	53	91	128	147	75	23	13	4	1	45.9	38.0	9.0
1700 - 1800	559	157	135	125	142	0	6	487	14	34	2	2	3	4	3	4	0	0	0	0	2	14	56	96	134	151	69	30	5	1	1	46.5	38.9	7.4
1800 - 1900	490	130	127	123	110	1	3	432	13	25	2	0	3	4	2	5	0	0	0	0	0	17	28	45	96	153	95	32	13	7	4	48.1	41.7	8.2
1900 - 2000	350	99	95	77	79	0	1	299	10	25	0	0	3	2	2	7	1	0	0	0	0	1	3	21	56	100	103	47	9	6	4	51.0	44.9	7.3
2000 - 2100	258	69	54	79	56	0	3	229	6	12	0	2	1	2	3	0	0	0	0	0	0	0	0	11	31	63	88	42	13	4	6	52.3	46.5	7.1
2100 - 2200	174	62	47	29	36	1	2	156	4	6	0	2	0	1	0	2	0	0	0	0	0	1	4	7	35	52	26	31	11	2	5	53.2	45.3	8.7
2200 - 2300	112	27	37	26	22	0	1	102	1	5	0	1	0	0	1	1	0	0	0	0	0	0	0	5	13	29	31	24	3	5	2	52.8	46.7	7.2
2300 - 0000	56	15	11	16	14	0	0	50	1	0	0	2	0	0	1	2	0	0	0	0	0	0	0	2	3	13	18	12	6	1	1	54.4	48.2	7.2
0700 - 1900	**5440**	**1307**	**1295**	**1390**	**1448**	**7**	**44**	**4453**	**127**	**530**	**22**	**21**	**21**	**46**	**64**	**98**	**2**	**5**	**2**	**21**	**64**	**136**	**336**	**831**	**1348**	**1518**	**780**	**267**	**95**	**25**	**17**	**46.8**	**39.5**	**7.9**
0600 - 2200	**6354**	**1554**	**1529**	**1595**	**1676**	**8**	**52**	**5210**	**148**	**602**	**24**	**27**	**25**	**53**	**79**	**117**	**3**	**6**	**2**	**21**	**64**	**138**	**345**	**881**	**1492**	**1768**	**1012**	**408**	**140**	**46**	**37**	**47.9**	**40.4**	**8.2**
0600 - 0000	**6522**	**1596**	**1577**	**1637**	**1712**	**8**	**53**	**5362**	**150**	**607**	**24**	**30**	**25**	**53**	**81**	**120**	**3**	**6**	**2**	**21**	**64**	**138**	**345**	**888**	**1508**	**1810**	**1061**	**444**	**149**	**52**	**40**	**47.9**	**40.6**	**8.2**
0000 - 0000	**6651**	**1624**	**1610**	**1675**	**1742**	**8**	**55**	**5426**	**150**	**624**	**25**	**31**	**25**	**56**	**106**	**136**	**3**	**6**	**2**	**21**	**64**	**138**	**345**	**891**	**1523**	**1835**	**1086**	**476**	**160**	**66**	**44**	**48.3**	**40.8**	**8.3**

Saturday 21 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme													Vehicle Speed													P-Tile 85%	Average Speed	Standard Deviation
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph			
0000 - 0100	45	16	12	9	8	0	1	36	0	4	0	1	0	0	3	0	0	0	0	0	0	0	0	3	1	12	10	9	7	3	0	56.4	48.5	7.5
0100 - 0200	18	5	8	1	4	0	0	13	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6	3	2	2	0	1	4	64.9	49.7	11.9
0200 - 0300	21	3	6	7	5	0	0	13	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0	0	1	3	3	4	6	3	1	62.0	53.0	8.5
0300 - 0400	8	5	0	1	2	0	0	5	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	1	3	0	-	53.1	10.9
0400 - 0500	18	4	2	4	8	0	1	8	0	5	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	4	3	3	3	1	1	57.7	49.6	8.9
0500 - 0600	30	8	8	7	7	0	2	12	1	4	0	0	1	2	2	6	0	0	0	0	0	0	0	0	3	8	7	6	0	2	4	62.2	50.8	11.0
0600 - 0700	63	8	12	25	18	0	0	41	2	10	1	1	0	1	4	2	1	0	0	0	0	0	0	0	3	13	20	11	8	2	6	58.8	51.4	9.8
0700 - 0800	147	28	41	42	36	0	1	111	0	17	2	2	1	2	6	5	0	0	0	0	0	0	0	0	20	41	31	28	18	4	5	56.1	48.1	7.6
0800 - 0900	230	49	43	61	77	0	1	204	1	19	1	1	0	0	1	2	0	0	0	0	0	0	4	15	48	46	71	27	14	2	3	51.4	44.5	7.5
0900 - 1000	324	76	81	73	94	0	9	270	8	24	4	2	0	0	2	5	0	0	0	0	2	3	11	35	87	94	58	18	12	3	1	48.1	41.5	7.5
1000 - 1100	408	80	111	104	113	1	6	381	6	10	0	0	0	0	1	3	0	0	0	0	0	1	8	59	125	121	62	23	4	3	2	47.0	41.0	6.5
1100 - 1200	486	117	135	118	116	1	13	426	5	30	1	3	0	0	4	3	0	0	0	0	1	0	6	38	121	151	111	34	12	8	4	49.0	43.0	6.9
1200 - 1300	481	99	123	129	130	1	7	438	7	21	1	1	0	1	3	0	0	1	0	1	0	9	18	42	116	169	78	33	7	5	3	47.9	41.6	7.6
1300 - 1400	412	106	103	114	89	1	12	358	10	23	2	0	0	1	2	3	0	0	0	0	2	8	10	30	97	129	85	31	12	2	6	48.8	42.5	8.0
1400 - 1500	370	99	92	80	99	1	8	344	2	8	0	3	0	1	0	3	0	0	0	0	0	1	3	28	83	93	85	58	13	4	2	51.7	44.2	7.1
1500 - 1600	358	79	82	92	105	1	5	325	5	21	0	0	0	0	1	0	0	0	0	0	0	1	4	14	80	112	83	37	17	4	6	51.4	44.4	7.6
1600 - 1700	340	59	104	88	89	0	14	300	5	19	0	0	0	1	1	0	0	0	0	0	0	0	3	27	58	114	92	30	11	4	1	49.4	43.7	6.3
1700 - 1800	306	80	88	70	68	0	5	285	1	12	1	1	0	0	0	1	0	0	0	0	0	0	0	9	40	98	94	44	13	4	4	51.0	45.9	6.4
1800 - 1900	272	85	75	67	45	0	7	244	0	13	1	0	1	1	2	3	0	0	0	0	1	0	10	28	20	60	88	45	13	2	5	51.4	45.1	8.2
1900 - 2000	202	57	52	54	39	0	2	190	1	6	0	0	0	0	3	0	0	0	0	0	0	0	1	15	21	40	56	44	12	6	7	53.9	47.2	8.3
2000 - 2100	133	31	38	35	29	0	0	124	1	8	0	0	0	0	0	0	0	0	0	0	0	2	0	3	4	18	43	33	18	6	6	57.0	50.5	9.2
2100 - 2200	94	25	25	21	23	0	0	86	0	7	0	0	0	0	1	0	0	0	0	0	0	0	0	2	4	27	25	22	9	4	1	54.4	48.0	6.9
2200 - 2300	72	18	18	19	17	0	1	67	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	1	13	27	14	5	5	4	3	56.4	46.6	9.3
2300 - 0000	55	13	11	19	12	0	1	53	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	14	9	11	4	3	2	55.7	46.7	8.7
0700 - 1900	**4134**	**957**	**1078**	**1038**	**1061**	**6**	**88**	**3686**	**50**	**217**	**13**	**13**	**2**	**7**	**23**	**28**	**0**	**1**	**0**	**1**	**5**	**24**	**77**	**325**	**895**	**1228**	**938**	**408**	**146**	**45**	**42**	**50.1**	**43.4**	**7.5**
0600 - 2200	**4626**	**1078**	**1205**	**1173**	**1170**	**6**	**90**	**4127**	**54**	**248**	**14**	**14**	**2**	**8**	**31**	**30**	**1**	**1**	**0**	**1**	**5**	**26**	**78**	**345**	**927**	**1326**	**1082**	**518**	**193**	**63**	**62**	**51.0**	**43.9**	**7.8**
0600 - 0000	**4753**	**1109**	**1234**	**1211**	**1199**	**6**	**92**	**4247**	**54**	**252**	**14**	**14**	**2**	**8**	**32**	**30**	**1**	**1**	**0**	**1**	**5**	**26**	**79**	**350**	**947**	**1367**	**1105**	**534**	**202**	**70**	**67**	**51.0**	**44.0**	**7.8**
0000 - 0000	**4893**	**1150**	**1270**	**1240**	**1233**	**6**	**96**	**4334**	**55**	**275**	**15**	**15**	**3**	**11**	**41**	**40**	**1**	**1**	**0**	**1**	**5**	**26**	**79**	**354**	**961**	**1397**	**1132**	**559**	**219**	**83**	**77**	**51.4**	**44.2**	**7.9**

Sunday 22 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme													Vehicle Speed													P-Tile 85%	Average Speed	Standard Deviation
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph			
0000 - 0100	38	8	16	7	7	0	1	34	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	6	8	6	7	4	5	2	0	55.5	45.3	9.1
0100 - 0200	30	9	7	12	2	0	0	24	0	4	0	0	0	0	1	1	0	0	0	0	1	0	0	3	2	5	9	7	2	1	0	54.8	46.3	9.2
0200 - 0300	20	5	4	5	6	0	0	16	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	4	4	1	2	58.8	52.5	10.8
0300 - 0400	12	3	4	2	3	0	0	10	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	2	1	0	56.1	51.6	5.3
0400 - 0500	15	5	3	3	4	0	1	13	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	4	4	1	62.4	55.6	8.6
0500 - 0600	28	7	6	4	11	0	0	20	0	2	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0	6	4	6	2	10	68.7	58.8	8.9
0600 - 0700	36	4	6	13	13	0	0	26	0	4	1	0	0	0	0	5	0	0	0	0	0	0	0	2	1	4	15	5	3	4	2	60.4	50.5	8.9
0700 - 0800	84	21	19	22	22	0	3	68	2	3	0	0	0	1	2	5	0	0	0	0	0	0	0	8	4	15	19	22	10	5	1	55.3	48.4	8.4
0800 - 0900	147	27	42	35	43	1	7	124	1	9	1	0	0	1	1	2	0	0	0	0	0	1	0	3	25	35	39	18	15	8	3	55.9	47.1	8.1
0900 - 1000	258	59	67	64	68	1	7	229	3	16	0	0	0	0	1	1	0	0	0	0	1	0	0	3	22	83	77	53	15	2	2	52.3	46.8	6.4
1000 - 1100	313	64	75	95	79	0	16	278	9	9	0	0	0	0	0	0	1	0	0	0	0	0	12	31	81	86	59	25	10	5	4	49.7	42.5	7.9
1100 - 1200	378	87	107	86	98	0	19	332	13	10	0	2	0	0	0	1	0	1	0	0	0	0	3	26	103	124	72	34	14	1	1	49.4	42.9	6.2
1200 - 1300	396	91	119	85	101	2	22	346	14	8	0	1	0	0	0	3	0	0	0	0	4	4	14	23	65	152	91	24	15	3	1	49.2	42.7	7.2
1300 - 1400	366	89	92	83	102	0	6	331	9	14	0	2	0	1	1	2	0	0	0	0	0	0	6	41	54	123	97	29	12	3	1	49.0	43.3	6.5
1400 - 1500	374	96	87	104	87	0	13	336	3	17	1	2	0	0	2	0	0	0	0	0	0	2	11	49	78	121	60	34	12	5	2	49.7	42.1	7.5
1500 - 1600	341	75	87	74	105	0	11	305	4	18	0	2	0	1	0	0	0	0	0	0	0	10	2	13	65	78	97	55	14	4	3	51.4	44.7	7.8
1600 - 1700	453	106	140	106	101	2	10	400	10	22	0	3	3	0	1	2	0	0	1	4	9	8	31	105	81	111	59	24	10	1	9	47.4	39.1	9.3
1700 - 1800	377	94	100	99	84	0	5	338	7	21	0	0	1	0	1	4	0	0	0	0	0	0	4	35	73	127	81	38	9	6	4	49.9	43.6	7.3
1800 - 1900	311	74	73	73	91	1	2	273	11	17	1	0	2	2	0	2	0	0	0	0	0	8	8	30	58	90	72	26	9	6	4	49.7	42.9	8.1
1900 - 2000	217	65	45	60	47	1	2	186	10	14	1	0	1	0	2	0	0	0	0	0	1	0	3	9	32	49	59	40	12	8	4	53.0	46.3	8.3
2000 - 2100	148	41	42	36	29	0	3	130	4	5	1	1	0	1	2	1	0	0	0	0	0	0	0	6	12	45	42	23	10	3	7	54.6	47.4	8.2
2100 - 2200	120	31	23	33	33	0	1	105	2	8	0	0	0	0	2	2	0	0	0	0	0	2	3	5	8	31	25	22	14	3	7	55.5	47.8	9.7
2200 - 2300	48	17	13	12	6	0	0	47	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	4	10	9	5	5	6	2	6	61.5	48.1	12.0
2300 - 0000	39	14	13	8	4	0	1	33	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0	3	4	12	4	8	3	3	2	57.7	47.8	9.3
0700 - 1900	**3798**	**883**	**1008**	**926**	**981**	**7**	**121**	**3360**	**86**	**164**	**3**	**12**	**6**	**6**	**9**	**22**	**0**	**2**	**1**	**4**	**14**	**33**	**91**	**367**	**709**	**1145**	**823**	**382**	**145**	**49**	**35**	**50.3**	**43.1**	**7.8**
0600 - 2200	**4319**	**1024**	**1124**	**1068**	**1103**	**8**	**127**	**3807**	**102**	**195**	**6**	**13**	**7**	**7**	**15**	**30**	**0**	**2**	**1**	**4**	**15**	**35**	**97**	**389**	**762**	**1274**	**964**	**472**	**184**	**67**	**55**	**50.8**	**43.6**	**8.1**
0600 - 0000	**4406**	**1055**	**1150**	**1088**	**1113**	**8**	**128**	**3887**	**103**	**198**	**6**	**13**	**7**	**7**	**17**	**30**	**0**	**2**	**1**	**4**	**15**	**35**	**98**	**396**	**776**	**1295**	**973**	**485**	**193**	**72**	**63**	**51.0**	**43.7**	**8.2**
0000 - 0000	**4549**	**1092**	**1190**	**1121**	**1146**	**8**	**130**	**4004**	**103**	**212**	**6**	**13**	**7**	**8**	**21**	**35**	**0**	**2**	**1**	**4**	**16**	**35**	**98**	**405**	**787**	**1312**	**1006**	**510**	**216**	**83**	**76**	**51.4**	**43.9**	**8.3**

Monday 23 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	13	8	3	2	0	0	0	11	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	4	3	1	62.9	56.2	8.3
0100 - 0200	8	3	3	2	0	0	0	6	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	3	3	0	0	0	1	-	45.2	9.7
0200 - 0300	9	0	0	2	7	0	0	7	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	4	1	1	-	56.4	12.2
0300 - 0400	13	2	3	3	5	0	0	7	0	3	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3	2	2	2	1	2	1	61.1	49.7	10.8
0400 - 0500	23	2	9	7	5	0	0	11	1	3	0	0	0	1	4	3	0	0	0	0	0	0	0	0	0	1	9	7	6	0	0	56.4	50.8	4.4
0500 - 0600	17	2	5	6	4	0	0	10	1	4	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	7	3	1	3	62.4	56.4	9.0
0600 - 0700	37	7	9	10	11	1	0	28	0	7	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	7	10	11	3	2	1	54.8	49.0	8.3
0700 - 0800	93	16	22	23	32	0	2	78	0	10	1	1	0	0	1	0	0	0	0	0	0	1	1	8	26	29	19	5	3	1	52.8	47.3	6.4
0800 - 0900	130	28	26	27	49	0	2	108	2	16	1	0	0	1	0	0	0	0	0	0	0	0	1	2	20	32	37	22	5	7	4	53.2	47.0	7.8
0900 - 1000	115	29	35	24	27	0	0	102	1	11	0	0	0	0	1	0	0	0	0	0	0	0	1	7	9	22	34	27	9	4	2	54.1	47.6	7.8
1000 - 1100	111	21	35	17	38	0	0	93	2	14	0	1	0	0	0	1	0	0	0	0	0	0	0	4	14	37	29	15	11	1	0	52.8	45.7	6.4
1100 - 1200	94	19	26	22	27	0	0	76	1	14	1	2	0	0	0	0	0	0	0	0	0	0	0	2	9	32	26	12	5	6	2	53.9	47.3	7.8
1200 - 1300	102	11	29	29	33	0	0	83	2	12	1	2	0	0	0	2	0	0	0	0	0	0	1	2	14	22	30	21	5	4	3	54.6	47.3	7.9
1300 - 1400	86	23	20	23	20	0	0	77	2	6	0	1	0	0	0	0	0	0	0	0	0	0	0	2	8	22	29	13	7	3	2	54.8	47.6	7.0
1400 - 1500	92	16	23	29	24	0	0	74	1	15	2	0	0	0	0	0	0	0	0	0	0	0	0	1	20	13	25	18	11	3	1	55.0	47.3	7.3
1500 - 1600	100	22	28	27	23	0	1	81	0	15	0	0	0	1	1	1	0	0	0	0	0	0	0	4	8	20	28	20	13	4	3	56.8	48.8	8.1
1600 - 1700	125	29	17	41	38	0	3	108	2	9	0	0	0	1	1	1	0	0	0	1	0	0	2	6	13	36	26	25	11	5	0	54.4	46.2	8.2
1700 - 1800	326	46	84	105	91	0	3	277	2	27	1	1	0	1	3	10	1	0	0	0	0	1	8	17	72	124	70	24	6	3	1	48.3	42.8	6.3
1800 - 1900	271	73	68	67	63	0	1	241	1	15	0	0	1	1	5	6	0	0	0	0	0	1	8	23	44	75	73	29	8	8	2	50.3	43.9	7.5
1900 - 2000	219	71	60	53	35	0	2	186	5	13	1	0	0	1	5	6	0	0	0	0	0	0	3	23	37	61	54	28	6	5	2	51.2	44.1	7.7
2000 - 2100	129	27	31	32	39	0	1	117	0	7	0	1	0	0	3	0	0	0	0	0	0	0	0	2	17	27	28	25	18	9	3	57.5	48.7	8.0
2100 - 2200	102	27	30	23	22	0	0	85	4	5	0	4	0	0	1	3	0	0	0	0	0	0	0	1	9	27	31	21	8	4	1	53.2	47.5	6.2
2200 - 2300	78	20	30	18	10	0	0	65	1	3	0	3	0	0	2	4	0	0	0	0	0	0	0	7	15	19	20	7	7	3	0	50.8	44.8	7.6
2300 - 0000	47	15	16	11	5	0	0	36	0	5	0	1	0	0	4	1	0	0	0	0	0	0	0	0	4	21	12	4	4	0	2	53.7	46.6	6.7
0700 - 1900	**1645**	**333**	**413**	**434**	**465**	**0**	**12**	**1398**	**16**	**164**	**7**	**8**	**1**	**5**	**12**	**21**	**1**	**0**	**0**	**1**	**0**	**2**	**22**	**71**	**239**	**461**	**436**	**245**	**96**	**51**	**21**	**52.8**	**45.7**	**7.6**
0600 - 2200	**2132**	**465**	**543**	**552**	**572**	**1**	**15**	**1814**	**25**	**196**	**8**	**13**	**1**	**6**	**21**	**31**	**1**	**0**	**0**	**1**	**1**	**2**	**25**	**97**	**304**	**583**	**559**	**330**	**131**	**71**	**28**	**53.2**	**45.9**	**7.6**
0600 - 0000	**2257**	**500**	**589**	**581**	**587**	**1**	**15**	**1915**	**26**	**204**	**8**	**17**	**1**	**6**	**27**	**36**	**1**	**0**	**0**	**1**	**1**	**2**	**25**	**104**	**323**	**623**	**591**	**341**	**142**	**74**	**30**	**53.2**	**45.9**	**7.6**
0000 - 0000	**2340**	**517**	**612**	**603**	**608**	**1**	**15**	**1967**	**28**	**218**	**9**	**18**	**1**	**7**	**33**	**42**	**1**	**0**	**0**	**1**	**1**	**2**	**25**	**106**	**327**	**632**	**607**	**361**	**160**	**81**	**37**	**53.7**	**46.1**	**7.8**

Tuesday 24 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	23	8	6	3	6	0	2	12	0	3	0	2	0	0	3	1	0	0	0	0	0	0	0	1	1	3	8	5	3	2	0	57.9	49.6	7.0
0100 - 0200	12	3	5	2	2	0	0	7	0	2	0	0	0	0	2	1	0	0	0	0	0	0	0	0	1	3	3	3	0	1	1	54.6	50.4	9.5
0200 - 0300	9	6	0	2	1	0	0	5	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	3	0	0	0	3	1	1	-	50.6	13.3
0300 - 0400	10	1	4	3	2	0	0	6	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	4	2	0	2	0	-	49.3	8.3
0400 - 0500	11	3	4	2	2	0	0	4	0	3	0	0	0	0	3	1	0	0	0	0	0	0	0	0	4	0	3	2	2	0	0	50.8	46.7	7.6
0500 - 0600	60	8	21	14	17	0	0	27	2	13	3	2	0	1	5	7	0	0	0	0	0	0	0	0	11	8	14	13	4	7	3	59.9	49.5	8.7
0600 - 0700	135	23	29	38	45	0	0	89	0	23	3	1	1	4	5	8	1	0	0	0	0	0	4	7	13	41	26	21	10	4	9	56.1	47.6	11.4
0700 - 0800	319	54	75	98	92	0	5	244	1	41	2	3	1	4	5	12	0	1	0	0	0	0	12	44	76	76	65	22	15	6	3	49.4	42.3	7.8
0800 - 0900	452	96	105	128	123	1	0	354	5	67	1	2	0	4	7	9	0	2	0	0	0	9	35	55	156	123	54	13	3	4	0	45.2	39.2	6.6
0900 - 1000	369	95	78	69	127	2	0	286	9	45	5	5	0	3	4	9	0	1	0	0	2	3	21	47	93	97	73	24	6	3	0	47.6	40.7	7.2
1000 - 1100	331	65	86	87	93	0	2	239	8	51	5	3	0	6	7	10	0	0	0	0	0	0	10	54	100	87	51	21	5	3	0	47.0	40.8	6.5
1100 - 1200	358	90	88	91	89	0	4	267	8	47	3	7	0	1	11	10	0	0	0	0	0	9	28	62	101	107	26	17	5	2	1	44.7	39.0	7.2
1200 - 1300	362	68	99	85	110	0	2	279	13	39	4	1	1	3	8	9	3	0	0	0	0	6	30	67	117	79	48	12	2	1	0	45.2	38.7	6.7
1300 - 1400	359	100	80	93	86	0	2	293	6	37	2	2	0	3	5	7	1	1	0	2	4	0	5	58	105	108	57	14	3	0	3	46.5	40.5	7.0
1400 - 1500	357	94	89	92	82	1	3	288	8	41	0	1	1	2	6	5	0	1	0	0	0	0	5	27	117	114	67	18	5	4	0	47.0	41.6	6.0
1500 - 1600	352	94	89	87	82	0	3	290	5	29	4	0	1	6	1	12	1	0	0	0	8	3	4	37	79	128	62	19	8	3	1	47.6	41.5	7.3
1600 - 1700	433	103	103	124	103	1	4	364	10	34	2	2	1	1	5	8	1	0	0	0	4	1	6	48	136	149	54	22	9	1	3	46.5	41.1	6.5
1700 - 1800	469	120	112	144	93	1	0	413	6	30	3	1	0	2	2	10	0	1	0	0	2	9	38	68	153	119	54	18	5	2	1	45.6	39.0	7.1
1800 - 1900	334	95	79	90	70	0	2	303	4	17	0	0	0	0	6	2	0	0	0	0	0	0	8	17	68	90	86	39	14	9	3	51.0	44.5	7.4
1900 - 2000	236	62	62	55	57	0	2	204	1	15	2	0	0	0	8	4	0	0	0	0	0	0	4	20	35	64	62	31	11	5	4	51.9	45.0	7.9
2000 - 2100	152	43	46	44	19	0	2	135	2	8	0	2	1	1	0	1	0	0	0	0	0	1	2	2	27	36	33	30	15	4	2	54.4	46.6	7.5
2100 - 2200	111	38	18	32	23	0	3	93	3	5	0	1	0	0	5	1	0	0	0	0	1	0	1	4	21	29	21	17	13	2	2	54.8	46.0	8.6
2200 - 2300	84	14	24	27	19	0	1	80	0	1	0	0	0	0	2	0	0	0	0	0	0	0	1	7	14	20	17	13	5	5	2	53.0	45.9	8.8
2300 - 0000	43	14	13	8	8	0	0	35	0	1	0	0	0	0	5	2	0	0	0	0	0	0	0	5	6	8	7	9	3	1	4	56.4	48.2	12.9
0700 - 1900	**4495**	**1074**	**1083**	**1188**	**1150**	**6**	**27**	**3620**	**83**	**478**	**31**	**27**	**5**	**35**	**67**	**103**	**6**	**7**	**0**	**2**	**20**	**40**	**202**	**584**	**1301**	**1277**	**697**	**239**	**80**	**38**	**15**	**47.2**	**40.6**	**7.1**
0600 - 2200	**5129**	**1240**	**1238**	**1357**	**1294**	**6**	**34**	**4141**	**89**	**529**	**36**	**31**	**7**	**40**	**85**	**117**	**7**	**7**	**0**	**2**	**21**	**41**	**213**	**617**	**1397**	**1447**	**839**	**338**	**129**	**53**	**32**	**48.1**	**41.3**	**7.6**
0600 - 0000	**5256**	**1268**	**1275**	**1392**	**1321**	**6**	**35**	**4256**	**89**	**531**	**36**	**31**	**7**	**40**	**92**	**119**	**7**	**7**	**0**	**2**	**21**	**41**	**214**	**629**	**1417**	**1475**	**863**	**360**	**137**	**59**	**38**	**48.3**	**41.4**	**7.7**
0000 - 0000	**5381**	**1297**	**1315**	**1418**	**1351**	**6**	**37**	**4317**	**93**	**553**	**39**	**35**	**7**	**41**	**109**	**130**	**7**	**7**	**0**	**2**	**21**	**41**	**214**	**631**	**1438**	**1490**	**895**	**385**	**149**	**72**	**43**	**48.8**	**41.6**	**7.8**

Wednesday 25 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	22	5	4	7	6	0	1	12	0	1	0	0	0	0	6	2	0	0	0	0	0	0	0	2	2	8	5	0	3	1	1	58.8	46.5	9.2
0100 - 0200	19	5	1	4	9	0	0	7	0	3	0	0	0	0	6	3	0	0	0	0	0	0	0	0	3	9	1	2	3	1	0	55.3	45.8	8.3
0200 - 0300	12	2	0	6	4	0	0	6	0	1	0	0	0	0	4	1	0	0	0	0	0	0	0	1	0	4	3	2	0	2	0	53.5	48.1	9.0
0300 - 0400	10	2	0	3	5	0	0	3	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	3	1	2	1	1	0	-	47.9	9.2
0400 - 0500	25	3	6	9	7	0	0	12	1	6	1	0	0	0	2	3	0	0	0	0	0	0	0	2	1	4	3	6	5	3	1	57.7	51.0	9.2
0500 - 0600	53	8	11	21	13	0	0	30	1	10	0	0	0	2	6	4	0	0	0	0	0	0	0	2	9	4	5	11	8	9	5	61.3	52.7	12.0
0600 - 0700	156	19	38	43	56	1	1	97	1	26	3	1	1	3	10	11	0	1	0	0	1	0	3	8	18	47	28	22	16	4	9	57.7	47.2	10.1
0700 - 0800	322	65	85	92	80	0	2	247	2	40	3	2	0	2	7	16	0	1	0	0	0	0	1	43	108	91	44	15	10	8	2	47.9	41.7	7.0
0800 - 0900	391	107	93	101	90	0	2	297	4	56	5	2	3	8	8	5	1	0	0	0	0	0	23	77	124	104	39	16	7	1	0	45.2	39.4	6.2
0900 - 1000	392	110	101	108	73	0	0	297	8	43	5	5	0	2	18	12	0	2	0	0	0	3	32	65	122	107	49	8	3	3	0	45.2	39.0	6.5
1000 - 1100	313	60	80	91	82	0	0	247	4	39	2	4	0	1	9	6	0	1	0	0	1	10	28	54	70	73	49	17	7	1	3	47.2	39.4	8.6
1100 - 1200	395	108	98	106	83	0	3	297	14	51	3	2	0	2	12	11	0	0	0	2	4	2	5	46	131	122	60	17	4	2	0	46.3	40.4	6.3
1200 - 1300	355	90	96	78	91	0	1	282	9	44	1	2	0	0	8	6	1	1	0	0	0	0	6	22	115	120	54	17	10	5	6	47.9	42.5	7.0
1300 - 1400	345	80	83	83	99	0	6	265	5	39	5	3	0	1	8	12	0	1	0	0	0	0	13	64	108	85	53	14	5	2	1	46.3	40.2	6.5
1400 - 1500	359	93	76	105	85	2	2	281	0	40	4	1	0	3	9	15	2	0	0	0	2	1	9	40	98	109	67	22	8	2	1	47.9	41.6	6.7
1500 - 1600	388	95	77	99	117	0	2	299	12	48	2	3	1	3	11	7	0	0	0	0	1	6	40	89	107	76	40	16	9	1	3	45.6	38.4	7.9
1600 - 1700	433	94	107	111	121	0	5	363	8	44	0	0	0	2	3	6	0	2	0	0	0	16	28	53	93	128	73	34	6	2	0	48.1	40.4	7.6
1700 - 1800	480	155	114	104	107	0	5	408	18	36	3	1	0	3	0	5	0	1	7	22	18	8	43	51	111	133	57	20	3	4	3	45.6	37.3	10.5
1800 - 1900	354	99	89	96	70	1	0	298	5	29	1	1	0	1	10	8	0	0	0	0	0	2	15	17	54	102	105	44	13	1	1	50.3	43.8	7.0
1900 - 2000	243	62	61	65	55	0	2	204	2	22	3	0	0	1	6	3	0	0	0	0	0	1	1	9	34	65	68	38	15	3	9	52.8	46.5	7.8
2000 - 2100	180	50	47	49	34	0	0	148	4	16	1	2	0	1	7	1	0	0	0	0	0	0	0	6	28	47	51	26	12	4	6	52.1	46.8	7.4
2100 - 2200	128	40	40	26	22	0	5	108	0	9	1	1	0	0	0	4	0	0	0	0	0	0	0	8	24	41	25	13	5	6	6	53.9	45.9	9.4
2200 - 2300	84	24	22	20	18	0	1	68	1	5	0	0	0	0	7	2	0	0	0	0	0	0	0	8	23	17	20	9	3	3	1	51.7	44.2	8.1
2300 - 0000	54	17	13	16	8	0	0	46	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	2	4	19	12	6	7	2	2	57.0	48.2	9.7
0700 - 1900	**4527**	**1156**	**1099**	**1174**	**1098**	**3**	**28**	**3581**	**89**	**509**	**34**	**26**	**4**	**28**	**103**	**109**	**4**	**9**	**7**	**24**	**26**	**48**	**243**	**621**	**1241**	**1250**	**690**	**240**	**85**	**32**	**20**	**47.0**	**40.2**	**7.7**
0600 - 2200	**5234**	**1327**	**1285**	**1357**	**1265**	**4**	**36**	**4138**	**96**	**582**	**42**	**30**	**5**	**33**	**126**	**128**	**4**	**10**	**7**	**24**	**27**	**49**	**247**	**652**	**1345**	**1450**	**862**	**339**	**133**	**49**	**50**	**48.3**	**41.1**	**8.1**
0600 - 0000	**5372**	**1368**	**1320**	**1393**	**1291**	**4**	**37**	**4252**	**97**	**589**	**42**	**30**	**5**	**33**	**139**	**130**	**4**	**10**	**7**	**24**	**27**	**49**	**247**	**662**	**1372**	**1486**	**894**	**354**	**143**	**54**	**53**	**48.5**	**41.2**	**8.2**
0000 - 0000	**5513**	**1393**	**1342**	**1443**	**1335**	**4**	**38**	**4322**	**99**	**614**	**43**	**30**	**5**	**35**	**166**	**143**	**4**	**10**	**7**	**24**	**27**	**49**	**247**	**669**	**1389**	**1518**	**912**	**377**	**163**	**71**	**60**	**48.8**	**41.4**	**8.3**

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	26	9	7	6	5	0	1	19	0	2	0	0	0	0	3	1	0	0	0	0	0	0	0	2	3	5	6	4	4	2	0	57.3	48.3	8.7
0100 - 0200	16	5	4	4	3	0	0	10	0	2	0	0	0	0	2	1	0	0	0	0	0	0	0	1	2	4	3	3	1	1	1	56.1	47.2	9.6
0200 - 0300	14	3	3	4	4	0	0	9	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1	2	2	2	3	1	1	62.4	51.7	10.6
0300 - 0400	11	3	2	3	3	0	0	5	0	3	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	2	2	2	1	2	0	61.5	51.1	8.8
0400 - 0500	18	3	5	4	6	0	0	9	0	3	0	0	0	0	3	2	0	0	0	0	0	0	0	0	1	2	4	4	3	2	1	60.4	51.7	9.3
0500 - 0600	43	8	10	13	11	0	0	22	1	7	1	0	0	2	3	6	0	0	0	0	0	0	0	1	5	6	9	9	5	4	5	62.2	51.7	10.2
0600 - 0700	98	14	24	27	34	0	1	61	1	17	2	1	0	2	6	7	0	0	0	0	0	0	1	4	10	25	21	16	9	4	6	57.9	48.2	10.2
0700 - 0800	225	43	56	60	64	0	2	172	1	28	2	2	1	2	5	9	0	0	0	0	0	1	8	23	52	58	43	21	11	5	2	51.2	43.1	8.1
0800 - 0900	318	72	76	81	89	0	2	252	5	41	2	2	1	3	4	5	0	0	0	0	0	2	14	41	85	86	52	21	9	4	2	48.3	41.4	7.5
0900 - 1000	309	79	73	74	82	1	3	243	6	37	3	2	0	2	6	6	0	1	0	0	1	3	14	37	73	89	58	24	8	3	1	48.5	41.5	7.5
1000 - 1100	315	67	80	86	83	0	4	259	7	31	1	2	0	2	3	6	0	1	0	0	1	2	10	37	83	99	53	21	7	2	1	47.6	41.4	7.0
1100 - 1200	353	87	90	88	88	0	7	285	8	34	1	2	0	2	7	7	0	0	0	0	2	3	10	42	94	106	60	23	7	3	2	47.9	41.3	7.3
1200 - 1300	352	79	95	85	93	0	6	291	9	28	1	1	0	2	6	5	1	1	0	0	1	3	16	39	93	109	60	20	7	3	2	47.9	41.3	7.3
1300 - 1400	350	86	85	87	92	0	4	292	9	28	2	2	0	2	5	6	0	1	0	1	2	7	15	47	82	96	66	22	8	2	3	48.1	41.0	8.0
1400 - 1500	350	90	78	92	91	1	5	291	5	32	2	1	1	2	4	5	0	0	0	1	2	4	14	45	85	95	63	26	10	3	1	48.5	41.3	7.8
1500 - 1600	344	82	84	87	92	0	4	288	6	30	1	1	1	3	4	6	0	0	0	0	2	5	13	45	84	89	62	28	10	3	3	49.0	41.6	8.1
1600 - 1700	410	95	106	107	102	1	6	351	8	34	1	1	1	1	3	4	0	0	1	3	8	10	24	58	91	112	63	27	9	3	2	47.9	39.9	8.7
1700 - 1800	421	108	108	108	97	0	4	370	8	26	2	1	1	1	1	7	0	0	1	3	3	6	24	45	98	124	73	33	6	3	2	48.5	40.9	8.2
1800 - 1900	343	95	88	84	77	1	2	303	6	19	1	0	1	2	4	5	0	0	0	0	0	5	13	29	60	95	85	37	11	5	3	50.3	43.2	7.8
1900 - 2000	242	68	62	60	52	0	2	209	5	16	1	0	1	1	4	4	0	0	0	0	0	0	2	17	35	62	64	40	11	6	5	52.6	45.6	7.9
2000 - 2100	165	42	43	46	34	0	2	145	3	9	0	2	0	1	3	1	0	0	0	0	0	0	0	6	21	37	45	30	14	5	6	54.8	47.5	8.2
2100 - 2200	118	36	31	26	26	0	2	102	3	6	0	2	0	0	2	2	0	0	0	0	0	0	1	5	15	33	28	20	10	3	3	54.4	46.6	8.4
2200 - 2300	79	21	25	19	15	0	2	70	0	3	0	1	0	0	2	1	0	0	0	0	0	0	0	5	15	20	18	10	6	4	3	55.0	46.2	8.9
2300 - 0000	49	14	13	13	9	0	0	41	0	2	0	0	0	0	4	1	0	0	0	0	0	0	0	3	5	15	10	8	4	2	2	55.7	47.2	9.1
0700 - 1900	**4091**	**982**	**1020**	**1039**	**1050**	**5**	**50**	**3396**	**77**	**369**	**19**	**18**	**7**	**22**	**51**	**70**	**2**	**5**	**2**	**9**	**21**	**50**	**175**	**489**	**978**	**1159**	**739**	**302**	**104**	**39**	**25**	**48.5**	**41.4**	**7.8**
0600 - 2200	**4713**	**1142**	**1180**	**1197**	**1195**	**5**	**56**	**3913**	**88**	**417**	**22**	**22**	**8**	**26**	**65**	**83**	**3**	**5**	**2**	**9**	**22**	**51**	**180**	**520**	**1059**	**1316**	**897**	**408**	**148**	**57**	**45**	**49.4**	**42.1**	**8.1**
0600 - 0000	**4841**	**1177**	**1217**	**1229**	**1218**	**5**	**58**	**4024**	**89**	**422**	**22**	**23**	**8**	**26**	**71**	**85**	**3**	**5**	**2**	**9**	**22**	**51**	**181**	**528**	**1079**	**1351**	**924**	**425**	**158**	**62**	**49**	**49.7**	**42.2**	**8.2**
0000 - 0000	**4968**	**1207**	**1248**	**1263**	**1250**	**5**	**60**	**4097**	**91**	**442**	**23**	**24**	**8**	**28**	**85**	**96**	**3**	**5**	**2**	**9**	**22**	**51**	**181**	**532**	**1093**	**1372**	**950**	**449**	**175**	**75**	**58**	**49.9**	**42.4**	**8.3**

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed														
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	P-Tile 85%	Average Speed	Standard Deviation
Mon	2340	517	612	603	608	1	15	1967	28	218	9	18	1	7	33	42	1	0	0	1	1	2	25	106	327	632	607	361	160	81	37	53.7	46.1	7.8
Tue	5381	1297	1315	1418	1351	6	37	4317	93	553	39	35	7	41	109	130	7	7	0	2	21	41	214	631	1438	1490	895	385	149	72	43	48.8	41.6	7.8
Wed	5513	1393	1342	1443	1335	4	38	4322	99	614	43	30	5	35	166	143	4	10	7	24	27	49	247	669	1389	1518	912	377	163	71	60	48.8	41.4	8.3
Thu	5451	1375	1400	1340	1336	5	50	4311	106	598	26	28	10	40	121	145	2	9	3	10	19	68	257	670	1223	1422	1010	478	155	67	69	49.4	41.9	8.4
Fri	6651	1624	1610	1675	1742	8	55	5426	150	624	25	31	25	56	106	136	3	6	2	21	64	138	345	891	1523	1835	1086	476	160	66	44	48.3	40.8	8.3
Sat	4893	1150	1270	1240	1233	6	96	4334	55	275	15	15	3	11	41	40	1	1	0	1	5	26	79	354	961	1397	1132	559	219	83	77	51.4	44.2	7.9
Sun	4549	1092	1190	1121	1146	8	130	4004	103	212	6	13	7	8	21	35	0	2	1	4	16	35	98	405	787	1312	1006	510	216	83	76	51.4	43.9	8.3

Church Stretton, Shropshire

Report Id 386/14-01
Site Name Site 1 of 1
Description A49, 300m north of B4371 Sandford Avenue
Direction Northbound

Thursday 19 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	14	5	1	2	6	0	1	10	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	5	2	4	0	1	55.9	52.1	8.4
0100 - 0200	14	3	3	7	1	0	0	7	1	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	3	5	1	0	58.2	51.2	7.4
0200 - 0300	18	1	4	7	6	0	0	10	0	4	0	1	0	0	2	1	0	0	0	0	0	0	0	0	1	2	2	3	4	4	2	62.6	55.0	8.4
0300 - 0400	15	2	3	1	9	0	0	6	0	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	1	5	3	2	2	1	1	55.3	49.8	10.5
0400 - 0500	17	5	6	0	6	0	0	8	1	3	0	2	0	0	0	3	0	0	0	0	0	0	0	1	3	3	4	4	2	0	0	51.4	46.2	6.7
0500 - 0600	46	3	14	14	15	0	0	27	1	9	1	2	0	1	2	3	0	0	0	0	0	0	0	1	1	7	14	13	4	4	2	56.8	50.6	7.4
0600 - 0700	137	20	28	29	60	0	0	103	1	20	0	0	0	2	2	8	0	1	0	0	0	0	0	0	10	30	38	28	22	6	3	56.4	49.5	7.3
0700 - 0800	342	79	77	94	92	1	1	288	4	34	3	0	0	0	4	7	0	0	0	0	0	2	1	4	22	112	95	71	27	4	4	53.5	47.1	6.7
0800 - 0900	402	104	132	80	86	1	0	341	2	39	0	0	0	4	6	9	0	0	0	0	0	0	1	5	80	118	113	61	18	3	3	51.4	45.3	6.2
0900 - 1000	378	91	99	105	83	0	4	281	5	50	5	1	2	6	7	15	1	1	0	0	0	0	2	7	75	155	93	32	11	2	1	48.8	43.9	5.4
1000 - 1100	371	95	95	85	96	0	2	282	12	48	0	3	1	4	6	13	0	0	0	0	0	0	3	11	70	138	103	31	10	3	2	49.0	44.1	5.8
1100 - 1200	355	80	105	82	88	0	0	283	3	46	1	0	0	4	6	11	0	1	0	0	0	0	1	7	59	125	97	52	8	5	1	50.8	44.8	5.8
1200 - 1300	315	75	83	80	77	1	2	216	7	62	4	1	0	2	9	11	0	0	0	0	0	0	0	4	65	114	79	40	7	4	2	50.3	44.7	5.8
1300 - 1400	352	79	81	111	81	0	3	277	9	37	3	2	1	2	5	12	0	1	0	0	0	1	0	8	71	124	91	33	18	3	3	50.1	44.6	6.4
1400 - 1500	387	95	91	96	105	0	2	297	5	54	3	0	0	3	12	10	0	1	0	0	0	0	1	12	65	143	101	39	18	4	4	50.3	44.8	6.3
1500 - 1600	350	89	88	78	95	0	2	284	2	39	0	3	1	1	8	8	1	1	0	0	0	0	0	15	60	123	94	34	17	6	1	50.1	44.6	6.2
1600 - 1700	460	115	91	116	138	0	5	372	4	51	1	1	0	4	8	13	0	1	0	0	0	0	0	17	106	159	112	49	12	5	0	49.4	43.9	5.7
1700 - 1800	479	143	129	115	92	0	2	440	1	25	1	0	0	0	1	9	0	0	0	0	0	0	0	11	69	138	137	79	33	8	4	52.8	46.2	6.7
1800 - 1900	287	87	87	61	52	0	4	243	3	21	2	0	0	2	5	7	0	0	0	0	0	0	1	2	29	65	84	64	26	7	9	54.8	48.2	7.6
1900 - 2000	173	61	42	35	35	0	1	150	0	12	0	0	2	2	2	4	0	0	0	0	0	0	0	0	12	43	43	36	17	15	7	57.9	49.9	7.8
2000 - 2100	97	33	31	15	18	0	0	83	0	8	1	1	0	1	1	2	0	0	0	0	0	0	0	0	9	18	23	23	12	8	4	57.9	50.3	8.2
2100 - 2200	74	16	17	20	21	0	3	66	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	1	5	15	14	19	11	5	4	57.5	50.8	8.7
2200 - 2300	63	18	11	20	14	0	0	58	0	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	7	11	21	12	5	5	2	57.5	49.2	7.6
2300 - 0000	39	8	12	11	8	0	1	33	0	1	0	3	0	0	0	1	0	0	0	0	0	0	0	0	5	12	6	5	9	0	2	58.2	48.9	8.6
0700 - 1900	**4478**	**1132**	**1158**	**1103**	**1085**	**3**	**27**	**3604**	**57**	**506**	**23**	**11**	**5**	**32**	**77**	**125**	**2**	**6**	**0**	**0**	**0**	**3**	**10**	**103**	**771**	**1514**	**1199**	**585**	**205**	**54**	**34**	**51.2**	**45.1**	**6.3**
0600 - 2200	**4959**	**1262**	**1276**	**1202**	**1219**	**3**	**31**	**4006**	**58**	**549**	**24**	**13**	**7**	**37**	**83**	**139**	**2**	**7**	**0**	**0**	**0**	**3**	**10**	**104**	**807**	**1620**	**1317**	**691**	**267**	**88**	**52**	**51.9**	**45.6**	**6.6**
0600 - 0000	**5061**	**1288**	**1299**	**1233**	**1241**	**3**	**32**	**4097**	**58**	**553**	**24**	**16**	**7**	**38**	**84**	**140**	**2**	**7**	**0**	**0**	**0**	**3**	**10**	**104**	**819**	**1643**	**1344**	**708**	**281**	**93**	**56**	**52.1**	**45.7**	**6.7**
0000 - 0000	**5185**	**1307**	**1330**	**1264**	**1284**	**3**	**33**	**4165**	**61**	**573**	**25**	**27**	**7**	**39**	**92**	**151**	**2**	**7**	**0**	**0**	**0**	**3**	**10**	**106**	**826**	**1665**	**1373**	**735**	**302**	**103**	**62**	**52.3**	**45.8**	**6.8**

Friday 20 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	14	1	3	6	4	0	0	6	0	3	0	3	0	0	1	1	0	0	0	0	0	0	0	1	1	3	5	0	3	0	1	57.3	49.6	11.4
0100 - 0200	16	5	3	4	4	0	0	7	0	3	0	3	0	0	2	1	0	0	0	0	0	0	0	0	4	1	3	5	1	2	0	58.2	48.4	7.7
0200 - 0300	14	0	6	4	4	0	0	7	0	3	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	0	2	6	1	2	0	57.3	50.3	8.2
0300 - 0400	11	3	2	1	5	0	0	1	0	0	0	0	0	0	1	9	0	0	0	0	0	0	0	2	1	3	3	1	0	1	0	47.4	43.8	7.9
0400 - 0500	16	0	4	4	8	0	0	6	0	3	0	1	0	0	4	2	0	0	0	0	0	0	0	0	1	2	5	4	1	2	1	61.3	51.2	7.7
0500 - 0600	59	14	12	14	19	0	0	31	1	7	0	4	0	0	5	11	0	0	0	0	0	0	0	0	3	13	20	8	8	4	3	58.8	49.9	8.4
0600 - 0700	133	18	30	32	53	0	0	91	1	24	1	0	1	1	7	7	0	0	0	0	0	0	1	2	13	35	36	24	12	5	5	56.8	47.9	8.2
0700 - 0800	313	72	67	85	89	0	2	253	2	40	2	0	0	2	4	7	0	1	0	0	0	0	0	3	27	96	95	59	20	7	6	53.7	47.5	6.6
0800 - 0900	427	111	102	104	110	0	2	356	1	39	7	1	3	4	7	7	0	0	0	0	0	0	0	11	82	166	97	58	9	3	1	50.1	44.3	5.5
0900 - 1000	350	89	102	75	84	0	4	293	3	29	2	0	0	2	11	6	0	0	0	0	0	0	1	24	55	105	89	50	17	4	5	51.9	45.2	7.4
1000 - 1100	471	143	73	146	109	0	5	391	7	43	2	0	0	6	6	10	0	1	0	0	0	0	5	19	91	199	101	41	5	8	2	49.2	43.5	5.9
1100 - 1200	423	102	120	99	102	0	1	345	14	46	3	2	0	0	7	5	0	0	0	0	0	0	4	15	82	141	121	46	10	2	2	49.4	44.1	5.8
1200 - 1300	401	106	104	92	99	0	11	309	7	47	2	0	1	3	15	6	0	0	0	0	0	0	0	19	73	137	100	48	18	2	4	50.8	44.6	6.4
1300 - 1400	380	84	113	87	96	1	3	287	7	59	1	2	1	3	11	3	0	2	0	1	0	0	2	18	67	125	101	44	18	3	1	50.6	44.5	6.5
1400 - 1500	438	125	96	83	134	0	8	343	6	58	2	0	2	3	8	6	1	1	0	0	0	0	0	2	88	169	107	40	19	10	3	50.3	45.0	6.2
1500 - 1600	445	113	123	96	113	0	3	369	7	41	0	2	1	3	6	13	0	0	0	0	0	0	0	8	89	147	120	60	15	5	1	50.8	44.9	5.7
1600 - 1700	484	109	136	129	110	0	7	412	6	38	2	2	0	4	3	9	0	1	0	1	0	3	2	30	85	167	113	59	12	4	8	50.1	44.1	7.1
1700 - 1800	511	160	103	128	120	0	4	437	3	47	1	0	1	3	3	10	2	0	0	0	0	0	3	20	94	161	131	69	22	9	2	51.7	45.0	6.6
1800 - 1900	359	117	80	79	83	0	5	320	6	22	0	0	0	2	2	1	0	1	0	0	0	0	0	1	27	102	140	50	27	9	3	52.8	47.5	6.1
1900 - 2000	261	89	70	57	45	1	2	241	1	14	0	0	0	0	1	1	0	0	0	0	1	0	0	0	14	56	98	62	16	9	5	53.5	48.6	6.6
2000 - 2100	166	56	43	32	35	0	2	147	3	12	0	0	1	0	1	0	0	0	0	0	0	0	0	1	11	41	44	36	15	6	12	55.7	49.9	8.4
2100 - 2200	111	34	29	23	25	0	1	95	1	8	0	0	0	1	3	2	0	0	0	0	0	0	0	1	7	21	33	29	14	5	1	55.9	49.1	7.3
2200 - 2300	84	23	22	20	19	0	0	80	1	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	10	16	20	16	10	5	6	58.8	49.7	9.0
2300 - 0000	56	10	17	19	10	0	0	51	1	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	6	16	19	9	4	1	1	51.4	47.2	6.7
0700 - 1900	**5002**	**1331**	**1219**	**1203**	**1249**	**1**	**55**	**4115**	**69**	**509**	**24**	**9**	**9**	**35**	**83**	**83**	**3**	**7**	**0**	**2**	**0**	**3**	**17**	**170**	**860**	**1715**	**1315**	**624**	**192**	**66**	**38**	**50.8**	**44.9**	**6.4**
0600 - 2200	**5673**	**1528**	**1391**	**1347**	**1407**	**2**	**60**	**4689**	**75**	**567**	**25**	**9**	**11**	**37**	**95**	**93**	**3**	**7**	**0**	**2**	**1**	**3**	**18**	**174**	**905**	**1868**	**1526**	**775**	**249**	**91**	**61**	**51.4**	**45.4**	**6.7**
0600 - 0000	**5813**	**1561**	**1430**	**1386**	**1436**	**2**	**60**	**4820**	**77**	**572**	**25**	**10**	**11**	**37**	**95**	**94**	**3**	**7**	**0**	**2**	**1**	**4**	**18**	**174**	**921**	**1900**	**1565**	**800**	**263**	**97**	**68**	**51.4**	**45.4**	**6.7**
0000 - 0000	**5943**	**1584**	**1460**	**1419**	**1480**	**2**	**60**	**4878**	**78**	**591**	**25**	**21**	**11**	**37**	**108**	**122**	**3**	**7**	**0**	**2**	**1**	**4**	**18**	**177**	**934**	**1922**	**1603**	**824**	**277**	**108**	**73**	**51.7**	**45.5**	**6.8**

Saturday 21 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme													Vehicle Speed															P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	38	10	13	9	6	0	1	29	0	5	0	1	0	0	1	1	0	0	0	0	0	0	0	0	4	9	10	6	5	1	3	57.3	49.4	8.8
0100 - 0200	21	4	10	1	6	0	0	12	0	6	0	2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	7	6	2	1	4	66.4	54.7	11.0
0200 - 0300	11	3	3	4	1	0	0	8	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	2	4	1	1	1	55.9	52.2	9.1
0300 - 0400	13	4	5	1	3	0	0	7	0	3	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	1	3	4	3	2	0	59.7	53.3	6.5
0400 - 0500	10	2	3	3	2	0	0	5	0	1	1	0	0	0	1	2	0	0	0	0	0	0	0	1	1	1	3	4	0	0	0	-	47.2	6.5
0500 - 0600	47	3	11	18	15	0	1	40	0	3	1	0	0	0	1	1	0	0	0	0	0	0	1	0	2	2	3	17	11	9	2	60.2	54.2	7.8
0600 - 0700	84	14	13	32	25	0	0	64	2	10	0	1	0	2	3	2	0	0	0	0	0	0	0	0	16	20	13	21	7	4	3	55.0	48.2	8.0
0700 - 0800	146	29	40	38	39	1	0	128	0	12	0	1	0	0	4	0	0	0	0	1	0	0	0	0	12	35	33	37	18	9	1	56.1	48.8	7.7
0800 - 0900	285	73	50	76	86	0	5	243	3	20	3	2	0	4	2	3	0	0	0	0	0	0	0	8	47	83	74	39	15	9	10	53.0	46.3	7.8
0900 - 1000	344	75	79	96	94	0	4	296	3	31	2	0	0	1	3	4	0	0	0	0	0	0	1	4	39	130	112	39	14	0	5	50.1	45.8	5.9
1000 - 1100	429	99	114	104	112	0	2	387	8	26	1	2	0	1	1	1	0	0	0	0	0	0	0	11	53	153	136	64	8	2	2	50.6	45.3	5.4
1100 - 1200	377	116	84	90	87	0	8	343	6	16	0	1	0	0	1	1	0	1	0	0	0	0	0	3	45	121	115	66	18	7	2	51.9	46.3	5.9
1200 - 1300	362	105	88	79	90	0	4	330	4	22	0	0	1	0	0	1	0	0	0	0	0	0	0	11	49	118	97	55	19	10	3	52.1	45.9	6.6
1300 - 1400	354	78	96	91	89	0	3	322	5	17	1	0	1	1	1	3	0	0	0	0	0	1	2	2	32	111	128	51	15	8	4	51.9	46.5	6.2
1400 - 1500	325	104	78	64	79	0	4	293	4	17	3	1	0	1	0	2	0	0	0	0	0	0	2	5	46	93	108	48	17	4	2	51.9	45.9	6.3
1500 - 1600	343	92	82	88	81	0	8	311	2	18	0	0	0	2	1	1	0	0	0	0	0	0	0	4	35	122	103	59	14	4	2	51.7	46.2	5.6
1600 - 1700	368	70	99	106	93	0	7	339	6	13	0	1	0	2	0	0	0	0	0	0	0	0	0	7	45	108	127	52	20	8	1	51.0	46.0	6.2
1700 - 1800	300	87	67	90	56	0	5	281	3	9	0	1	0	0	0	1	0	0	0	0	0	0	0	2	37	74	109	52	16	7	3	52.3	46.8	6.1
1800 - 1900	215	65	55	43	52	0	7	196	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	1	16	45	63	45	22	11	12	58.4	50.2	10.4
1900 - 2000	179	50	50	47	32	0	0	172	1	4	0	0	0	1	0	1	0	0	0	0	0	0	0	0	6	33	63	38	23	9	7	56.4	50.4	7.2
2000 - 2100	114	21	23	38	32	0	4	103	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	3	16	21	26	29	8	4	7	57.7	49.4	10.7
2100 - 2200	121	24	38	26	33	0	3	110	0	6	0	0	0	1	1	0	0	0	0	0	0	0	0	1	4	17	35	30	20	5	9	58.6	51.7	7.6
2200 - 2300	101	37	33	22	9	0	0	94	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	25	19	26	8	4	3	54.1	47.4	8.4
2300 - 0000	78	23	20	22	13	0	0	74	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	25	22	11	5	2	2	52.8	46.7	7.0
0700 - 1900	**3848**	**993**	**932**	**965**	**958**	**1**	**57**	**3469**	**45**	**212**	**10**	**9**	**2**	**12**	**13**	**17**	**0**	**1**	**0**	**1**	**0**	**1**	**5**	**58**	**456**	**1193**	**1205**	**607**	**196**	**79**	**47**	**52.1**	**46.4**	**6.6**
0600 - 2200	**4346**	**1102**	**1056**	**1108**	**1080**	**1**	**64**	**3918**	**49**	**237**	**11**	**10**	**2**	**16**	**17**	**20**	**0**	**1**	**0**	**1**	**0**	**1**	**5**	**62**	**498**	**1284**	**1342**	**725**	**254**	**101**	**73**	**52.8**	**46.8**	**7.0**
0600 - 0000	**4525**	**1162**	**1109**	**1152**	**1102**	**1**	**64**	**4086**	**52**	**245**	**11**	**10**	**2**	**16**	**17**	**20**	**0**	**1**	**0**	**1**	**0**	**1**	**8**	**69**	**515**	**1334**	**1383**	**762**	**267**	**107**	**78**	**52.8**	**46.8**	**7.0**
0000 - 0000	**4665**	**1188**	**1154**	**1188**	**1135**	**1**	**66**	**4187**	**52**	**264**	**13**	**15**	**2**	**16**	**21**	**27**	**0**	**1**	**0**	**1**	**0**	**1**	**9**	**71**	**523**	**1348**	**1411**	**803**	**289**	**121**	**88**	**53.2**	**47.0**	**7.1**

Sunday 22 June 2014

Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme													Vehicle Speed															P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
0000 - 0100	47	12	12	13	10	0	0	42	1	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	4	14	8	9	8	2	2	58.2	49.5	8.6
0100 - 0200	27	5	9	9	4	0	0	21	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	3	10	3	1	0	54.8	48.1	7.4
0200 - 0300	13	7	3	3	0	0	0	12	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	3	0	0	0	49.9	46.5	4.4
0300 - 0400	11	3	4	2	2	0	0	8	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	4	0	2	2	2	0	59.5	51.0	9.0
0400 - 0500	16	4	2	2	8	0	0	12	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	5	5	2	3	1	0	57.0	49.3	6.5
0500 - 0600	26	4	7	6	9	0	0	18	0	5	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3	4	2	6	2	6	3	63.3	53.3	9.5
0600 - 0700	47	13	10	8	16	0	1	40	2	3	0	0	0	0	0	1	0	0	0	0	0	0	0	2	3	10	12	8	7	1	4	58.6	50.2	9.7
0700 - 0800	105	21	24	31	29	1	0	78	4	17	0	0	0	2	1	2	0	0	0	0	1	0	0	2	10	14	20	25	21	6	6	59.1	50.7	9.3
0800 - 0900	170	28	34	49	59	0	1	154	3	6	0	0	1	3	0	2	0	0	0	0	0	0	0	1	16	37	49	38	21	6	2	55.5	48.6	6.6
0900 - 1000	282	55	56	82	89	1	10	248	6	12	0	1	0	0	2	1	1	0	0	0	0	1	0	3	27	85	80	63	14	4	5	52.3	46.9	6.4
1000 - 1100	326	63	79	95	89	0	7	299	6	9	1	0	0	1	3	0	0	0	0	0	0	0	1	3	30	108	105	52	14	6	7	51.2	46.5	6.6
1100 - 1200	381	77	109	102	93	2	13	325	18	21	0	0	0	0	1	1	0	0	0	1	1	0	0	6	50	140	115	42	15	6	5	50.8	45.6	7.3
1200 - 1300	349	96	92	86	75	2	3	318	11	11	1	0	0	1	1	1	0	0	0	1	0	1	0	3	52	107	102	46	21	8	8	51.9	46.6	8.4
1300 - 1400	401	110	102	105	84	0	6	365	8	17	0	1	0	0	3	1	0	0	0	0	5	0	1	2	36	134	111	72	27	7	6	52.8	46.6	7.0
1400 - 1500	380	97	83	95	105	0	8	346	10	13	0	0	0	0	0	3	0	0	0	0	0	0	0	3	69	113	107	58	20	5	5	52.1	45.9	6.6
1500 - 1600	445	101	101	122	121	0	13	405	9	15	0	0	0	0	1	1	1	0	0	0	0	0	0	7	68	167	119	50	20	6	8	51.2	45.7	7.0
1600 - 1700	475	107	106	119	143	0	8	426	11	23	0	0	1	3	0	2	1	0	0	0	0	0	0	7	64	159	172	53	16	4	0	50.1	45.3	5.2
1700 - 1800	383	115	103	100	65	0	12	343	3	21	0	0	1	1	1	1	0	0	0	0	0	0	0	1	51	96	129	70	23	6	7	53.0	47.1	6.2
1800 - 1900	343	77	87	88	91	1	0	303	16	14	0	0	3	2	4	0	0	0	0	0	1	3	0	12	39	87	111	57	18	8	7	52.6	46.4	7.5
1900 - 2000	276	66	62	81	67	0	3	224	18	14	0	0	4	9	2	1	1	0	0	0	0	0	0	1	23	91	94	39	16	2	10	52.8	47.2	7.1
2000 - 2100	273	67	77	47	82	1	5	194	22	31	0	0	4	14	1	1	0	0	0	0	0	0	0	1	19	87	97	34	20	8	7	54.4	47.8	7.2
2100 - 2200	217	51	36	70	60	0	1	184	9	12	0	0	5	4	1	1	0	0	0	0	1	4	5	1	27	45	64	44	11	6	9	53.5	47.0	9.2
2200 - 2300	82	34	11	17	20	0	0	73	2	2	0	0	2	1	1	1	0	0	0	0	0	1	1	2	10	29	23	8	6	2	57.5	50.3	7.3
2300 - 0000	25	6	7	4	8	0	1	17	1	4	0	0	0	1	0	1	0	0	0	0	0	0	0	0	4	2	3	6	5	4	1	60.4	52.2	9.6
0700 - 1900	**4040**	**947**	**976**	**1074**	**1043**	**7**	**81**	**3610**	**105**	**179**	**2**	**2**	**6**	**13**	**17**	**15**	**3**	**0**	**0**	**2**	**8**	**5**	**2**	**50**	**512**	**1247**	**1220**	**626**	**230**	**72**	**66**	**52.3**	**46.4**	**7.0**
0600 - 2200	**4853**	**1144**	**1161**	**1280**	**1268**	**8**	**91**	**4252**	**156**	**239**	**2**	**2**	**19**	**40**	**21**	**19**	**4**	**0**	**0**	**2**	**9**	**9**	**7**	**55**	**584**	**1480**	**1487**	**751**	**284**	**89**	**96**	**52.6**	**46.6**	**7.1**
0600 - 0000	**4960**	**1184**	**1179**	**1301**	**1296**	**8**	**92**	**4342**	**159**	**245**	**2**	**2**	**21**	**42**	**22**	**21**	**4**	**0**	**0**	**2**	**9**	**9**	**8**	**56**	**590**	**1492**	**1519**	**780**	**297**	**99**	**99**	**52.8**	**46.7**	**7.2**
0000 - 0000	**5100**	**1219**	**1216**	**1336**	**1329**	**8**	**92**	**4455**	**160**	**260**	**2**	**4**	**22**	**42**	**24**	**27**	**4**	**0**	**0**	**2**	**9**	**9**	**8**	**57**	**603**	**1528**	**1542**	**812**	**315**	**111**	**104**	**52.8**	**46.8**	**7.2**

Monday 23 June 2014

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Number Vehicle Classes ARX Scheme Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	Vehicle Speed MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	P-Tile 85%	Average Speed	Standard Deviation
0000 - 0100	17	7	4	2	4	0	0	16	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	5	3	4	2	64.0	56.9	9.3
0100 - 0200	12	3	2	7	0	0	0	8	1	1	0	0	0	0	1	1	0	0	0	0	0	0	1	1	2	1	2	2	2	1	0	57.7	46.8	11.0
0200 - 0300	14	2	2	4	6	0	0	7	1	4	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	5	2	4	1	0	55.5	50.1	6.8
0300 - 0400	14	1	5	4	4	0	0	7	0	2	0	0	1	1	1	2	0	0	0	0	0	0	0	0	1	2	4	5	1	1	0	54.6	49.4	6.2
0400 - 0500	36	8	7	9	12	0	0	23	0	3	0	1	0	0	1	8	0	0	0	0	0	0	1	0	5	4	8	9	5	3	1	58.8	49.6	8.7
0500 - 0600	79	10	22	23	24	1	0	52	0	11	0	2	0	1	4	8	0	0	0	0	1	0	0	0	4	14	13	16	16	9	6	60.6	52.4	9.7
0600 - 0700	16	15	0	0	1	0	0	12	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	1	7	4	0	3	0	60.8	50.4	7.2
0700 - 0800	17	4	8	3	2	1	0	14	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	3	4	4	2	0	1	52.3	46.3	11.6
0800 - 0900	15	3	3	4	5	0	0	9	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	1	1	8	3	0	1	0	1	48.3	45.5	8.0
0900 - 1000	6	2	0	0	4	0	0	3	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3	1	1	0	0	0	-	44.3	5.0
1000 - 1100	3	2	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	-	41.1	5.9
1100 - 1200	16	7	3	2	4	0	0	11	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	6	2	3	0	0	55.3	47.9	5.2
1200 - 1300	2	0	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	-	49.5	6.3
1300 - 1400	5	0	2	0	3	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	2	0	0	0	-	41.8	11.5
1400 - 1500	15	4	1	6	4	0	0	8	0	2	0	1	0	0	4	0	0	0	0	0	0	0	0	0	4	3	4	2	1	1	0	53.9	46.5	7.7
1500 - 1600	11	1	3	5	2	0	0	10	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	1	2	0	1	0	50.1	45.1	8.2
1600 - 1700	15	4	4	1	6	1	0	11	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	4	4	3	0	0	56.6	47.5	10.3
1700 - 1800	305	57	75	96	77	0	3	259	2	29	1	0	0	2	3	5	0	1	0	0	0	0	0	11	24	105	89	54	17	5	0	51.7	46.0	6.0
1800 - 1900	240	83	60	53	44	1	3	213	3	14	0	0	0	0	3	2	1	0	0	1	0	0	0	6	23	60	68	43	27	7	5	55.0	47.8	7.8
1900 - 2000	145	43	35	36	31	0	3	121	2	6	0	0	1	1	3	6	2	0	0	0	0	0	0	2	21	26	41	20	17	9	9	56.6	49.4	9.2
2000 - 2100	120	37	33	25	25	0	11	89	1	9	0	1	1	0	0	8	0	0	0	0	0	0	0	0	13	28	24	25	12	4	14	58.8	51.4	12.1
2100 - 2200	83	28	24	11	20	0	1	78	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	5	14	27	15	14	6	2	57.9	50.2	7.7
2200 - 2300	42	12	12	8	10	0	0	35	2	2	0	0	0	0	1	2	0	0	0	0	0	0	1	1	8	9	4	9	4	3	3	56.4	48.8	10.7
2300 - 0000	21	4	8	2	7	0	0	18	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	3	3	3	4	3	3	1	1	57.5	47.6	9.4
0700 - 1900	**650**	**167**	**160**	**171**	**152**	**3**	**6**	**544**	**6**	**60**	**2**	**2**	**0**	**2**	**14**	**9**	**1**	**1**	**0**	**2**	**1**	**0**	**1**	**20**	**61**	**193**	**182**	**115**	**54**	**14**	**7**	**53.5**	**46.7**	**7.2**
0600 - 2200	**1014**	**290**	**252**	**243**	**229**	**3**	**21**	**844**	**9**	**77**	**2**	**4**	**2**	**4**	**20**	**24**	**3**	**1**	**0**	**2**	**1**	**0**	**1**	**23**	**100**	**262**	**281**	**179**	**97**	**36**	**32**	**55.0**	**48.0**	**8.4**
0600 - 0000	**1077**	**306**	**272**	**253**	**246**	**3**	**21**	**897**	**11**	**80**	**2**	**5**	**2**	**4**	**21**	**27**	**3**	**1**	**0**	**2**	**1**	**0**	**2**	**27**	**111**	**274**	**289**	**191**	**104**	**40**	**36**	**55.3**	**48.0**	**8.6**
0000 - 0000	**1249**	**337**	**314**	**302**	**296**	**4**	**21**	**1010**	**13**	**101**	**2**	**9**	**3**	**6**	**28**	**48**	**3**	**1**	**0**	**2**	**2**	**0**	**4**	**28**	**125**	**297**	**322**	**230**	**135**	**59**	**45**	**56.1**	**48.5**	**8.7**

Tuesday 24 June 2014

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Number Vehicle Classes ARX Scheme Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	Vehicle Speed MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	P-Tile 85%	Average Speed	Standard Deviation
0000 - 0100	16	5	2	3	6	0	0	9	0	4	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	5	4	1	3	2	1	62.0	52.2	11.4
0100 - 0200	23	13	5	1	4	0	0	12	0	4	0	5	0	0	2	0	0	0	0	0	0	0	0	0	0	1	5	10	5	1	1	57.5	53.2	6.9
0200 - 0300	12	7	2	1	2	0	0	6	0	1	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	2	3	2	4	1	0	0	50.8	46.7	6.2
0300 - 0400	12	3	4	3	2	0	0	5	0	3	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	2	3	3	2	2	0	0	53.9	47.1	6.9
0400 - 0500	24	4	3	7	10	0	0	11	0	6	0	1	0	0	2	4	0	0	0	0	0	0	0	0	0	1	8	5	7	2	1	0	52.1	48.2	6.5
0500 - 0600	63	8	14	21	20	0	0	39	0	13	0	2	0	0	4	5	0	0	0	0	0	0	0	0	0	2	17	11	17	9	6	1	58.2	50.6	7.1
0600 - 0700	176	38	31	47	60	0	1	132	2	23	1	0	1	2	7	7	0	0	0	0	0	0	0	1	14	48	39	37	21	11	5	56.8	49.1	7.5
0700 - 0800	369	62	85	110	112	0	1	304	1	43	5	1	2	0	3	8	1	0	0	0	0	0	1	6	51	109	96	72	19	10	5	52.6	46.5	6.7
0800 - 0900	488	126	142	118	102	0	1	412	6	53	3	2	0	0	3	8	0	0	0	0	0	0	0	15	105	153	129	68	14	3	1	50.6	44.3	5.9
0900 - 1000	368	88	80	103	97	0	2	288	6	36	7	1	0	3	9	16	0	0	0	0	0	0	0	30	83	137	62	34	13	7	2	49.9	43.5	6.7
1000 - 1100	343	85	78	73	107	0	2	270	5	41	4	1	0	3	10	7	0	0	0	0	0	0	6	7	51	128	95	37	16	2	1	50.1	44.5	6.0
1100 - 1200	348	79	97	95	77	1	7	254	8	51	2	2	1	4	6	11	0	1	0	0	1	0	0	18	62	134	83	40	7	2	1	49.7	43.8	5.7
1200 - 1300	365	93	88	94	90	0	2	288	5	41	1	1	0	3	8	14	2	0	0	0	0	0	1	16	97	106	98	27	17	2	1	49.2	43.6	6.0
1300 - 1400	325	50	88	84	103	1	7	244	9	38	1	0	1	7	7	10	0	0	0	1	0	0	0	8	63	133	62	37	16	4	1	50.8	44.4	6.2
1400 - 1500	341	76	88	97	80	0	3	258	6	49	3	4	2	0	5	11	0	0	0	0	0	0	12	11	69	123	79	34	6	5	2	49.7	43.5	6.5
1500 - 1600	374	93	77	100	104	0	7	276	2	55	1	4	0	2	13	13	0	1	0	0	0	0	0	11	68	136	89	51	10	3	6	51.0	44.8	6.3
1600 - 1700	464	104	120	111	129	0	5	378	3	49	3	1	1	2	6	15	1	0	0	0	0	0	1	20	118	138	114	52	13	4	4	50.1	43.9	6.3
1700 - 1800	403	104	120	87	92	0	4	340	4	36	0	3	1	0	3	11	1	0	0	0	0	0	0	17	79	126	84	64	21	8	4	52.1	45.1	7.0
1800 - 1900	279	98	62	67	52	0	5	235	2	19	1	0	0	0	2	4	11	0	0	0	0	0	0	4	39	83	64	53	25	8	3	53.7	46.8	6.8
1900 - 2000	184	48	60	35	41	0	1	164	1	10	0	1	0	1	2	3	0	1	0	0	0	0	0	4	29	39	65	17	19	7	4	55.0	47.1	7.2
2000 - 2100	94	31	22	20	21	0	2	73	0	10	2	0	1	1	2	3	0	0	0	0	0	0	0	2	10	26	25	18	3	4	6	53.9	48.6	9.9
2100 - 2200	57	14	12	10	21	0	0	53	0	3	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1	8	16	15	6	3	6	59.9	52.1	10.9
2200 - 2300	49	21	11	8	9	0	0	41	0	4	0	0	0	0	1	3	0	0	0	0	0	0	0	0	6	10	11	12	7	1	2	56.4	48.9	8.1
2300 - 0000	19	5	6	6	2	0	0	14	0	3	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	3	4	4	2	4	0	61.5	51.1	8.6
0700 - 1900	**4467**	**1058**	**1125**	**1139**	**1145**	**2**	**46**	**3547**	**57**	**511**	**31**	**20**	**8**	**26**	**77**	**135**	**5**	**2**	**0**	**1**	**1**	**0**	**21**	**163**	**885**	**1506**	**1055**	**569**	**177**	**58**	**31**	**50.8**	**44.5**	**6.4**
0600 - 2200	**4978**	**1189**	**1250**	**1251**	**1288**	**2**	**50**	**3969**	**60**	**557**	**34**	**21**	**10**	**30**	**88**	**149**	**5**	**3**	**0**	**1**	**1**	**0**	**22**	**171**	**939**	**1627**	**1200**	**656**	**226**	**83**	**52**	**51.2**	**44.9**	**6.8**
0600 - 0000	**5046**	**1215**	**1267**	**1265**	**1299**	**2**	**50**	**4024**	**60**	**564**	**34**	**21**	**10**	**30**	**90**	**153**	**5**	**3**	**0**	**1**	**1**	**0**	**22**	**171**	**947**	**1640**	**1215**	**672**	**235**	**88**	**54**	**51.4**	**45.0**	**6.8**
0000 - 0000	**5196**	**1255**	**1297**	**1301**	**1343**	**2**	**50**	**4106**	**60**	**595**	**34**	**32**	**10**	**30**	**101**	**168**	**5**	**3**	**0**	**1**	**1**	**0**	**22**	**171**	**954**	**1677**	**1245**	**713**	**257**	**98**	**57**	**51.7**	**45.2**	**6.9**

Wednesday 25 June 2014

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Number Vehicle Classes ARX Scheme Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	Vehicle Speed MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	P-Tile 85%	Average Speed	Standard Deviation
0000 - 0100	11	3	4	3	1	0	0	9	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	3	0	5	0	0	56.4	50.6	6.5
0100 - 0200	9	3	2	2	2	0	0	5	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	3	0	4	1	0	0	-	48.2	7.2
0200 - 0300	8	0	1	3	4	0	0	4	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	1	2	0	0	3	1	1	0	-	48.6	10.1
0300 - 0400	18	4	8	4	2	0	0	5	0	3	0	0	0	1	2	7	0	0	0	0	0	0	0	1	2	5	6	2	2	0	0	51.0	45.7	6.3
0400 - 0500	26	3	4	8	11	0	0	10	0	7	0	1	0	0	1	7	0	0	0	0	0	0	1	2	1	7	5	3	6	1	0	55.7	47.3	8.9
0500 - 0600	57	13	9	16	19	0	1	36	0	7	0	2	0	1	3	7	0	0	0	0	0	0	1	2	6	15	9	13	5	3	3	56.8	48.5	9.1
0600 - 0700	166	24	39	40	63	0	0	122	2	22	1	1	0	2	8	8	0	0	0	0	0	0	0	2	26	35	33	32	23	9	6	56.6	48.7	8.4
0700 - 0800	359	67	79	103	110	0	1	287	5	44	5	1	0	3	3	10	0	0	0	0	0	0	1	2	42	113	105	53	26	9	8	53.2	46.9	6.8
0800 - 0900	437	91	128	121	97	0	2	358	7	42	2	2	0	3	6	12	0	3	0	0	0	0	0	14	89	146	114	50	18	3	3	50.8	44.5	6.0
0900 - 1000	368	100	85	89	94	0	2	308	5	32	2	0	0	2	6	10	1	0	0	0	0	0	0	10	68	126	103	43	15	3	0	50.6	44.7	5.6
1000 - 1100	389	104	86	107	92	0	2	299	11	48	2	2	3	2	3	17	0	0	0	0	0	0	1	10	105	144	80	36	8	3	2	48.5	43.5	6.2
1100 - 1200	366	99	80	91	96	0	3	277	10	46	3	1	0	1	12	12	0	1	0	0	0	0	0	6	87	127	82	43	11	9	1	50.8	44.6	6.1
1200 - 1300	337	80	83	90	84	1	12	247	9	46	2	3	0	0	7	10	0	0	0	0	0	0	2	2	58	120	89	44	14	3	5	50.8	45.3	6.3
1300 - 1400	330	78	81	80	91	1	3	249	5	45	3	1	0	3	10	8	2	0	0	0	0	0	0	4	36	121	106	41	12	6	4	51.0	45.9	5.9
1400 - 1500	359	77	107	72	103	1	4	263	7	52	4	1	1	5	9	12	0	0	0	0	0	0	0	1	52	132	111	44	10	3	6	50.6	45.6	6.1
1500 - 1600	377	77	88	113	99	0	1	300	5	42	2	5	0	1	6	13	0	2	0	0	0	0	0	3	72	146	102	32	17	3	2	49.2	44.6	5.7
1600 - 1700	461	100	97	130	134	0	8	369	2	55	2	2	3	1	4	15	0	0	0	0	0	0	3	16	83	140	136	55	14	7	7	50.8	45.0	6.5
1700 - 1800	499	128	135	140	96	0	2	433	4	41	2	0	0	3	5	7	1	1	0	0	0	0	1	16	77	174	112	74	34	7	4	52.8	45.4	6.7
1800 - 1900	253	77	63	56	57	3	3	216	1	15	0	1	0	3	4	6	1	0	0	0	1	1	0	3	30	65	92	35	18	7	1	52.3	46.4	6.9
1900 - 2000	189	59	47	43	40	0	1	167	2	10	0	0	1	2	4	2	0	0	0	0	0	1	0	0	21	42	52	46	15	8	4	54.6	48.2	7.2
2000 - 2100	129	38	29	28	34	1	2	109	1	11	0	0	0	1	1	3	0	0	0	0	0	1	1	0	7	26	29	34	17	8	6	58.2	50.6	9.0
2100 - 2200	80	20	24	18	18	0	2	74	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	1	7	16	23	13	15	2	3	57.5	49.4	7.5
2200 - 2300	50	16	8	11	15	0	0	42	2	3	0	0	0	1	0	2	0	0	0	0	0	0	0	0	6	7	13	12	7	4	1	58.8	49.5	7.5
2300 - 0000	40	10	7	11	12	0	0	35	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	4	10	4	6	9	5	64.6	55.1	10.9
0700 - 1900	**4535**	**1078**	**1112**	**1192**	**1153**	**6**	**43**	**3606**	**71**	**508**	**29**	**19**	**7**	**27**	**75**	**132**	**5**	**7**	**0**	**0**	**1**	**1**	**8**	**87**	**799**	**1554**	**1232**	**550**	**197**	**63**	**43**	**51.0**	**45.2**	**6.3**
0600 - 2200	**5099**	**1219**	**1251**	**1321**	**1308**	**7**	**48**	**4078**	**76**	**553**	**30**	**20**	**8**	**32**	**90**	**145**	**5**	**7**	**0**	**0**	**1**	**3**	**9**	**90**	**860**	**1673**	**1369**	**675**	**267**	**90**	**62**	**51.7**	**45.6**	**6.6**
0600 - 0000	**5189**	**1245**	**1266**	**1343**	**1335**	**7**	**48**	**4155**	**79**	**559**	**30**	**21**	**8**	**33**	**90**	**147**	**5**	**7**	**0**	**0**	**1**	**3**	**9**	**90**	**868**	**1684**	**1392**	**691**	**280**	**103**	**68**	**51.9**	**45.7**	**6.7**
0000 - 0000	**5318**	**1271**	**1294**	**1379**	**1374**	**7**	**49**	**4224**	**79**	**579**	**30**	**24**	**8**	**35**	**97**	**174**	**5**	**7**	**0**	**0**	**1**	**3**	**11**	**96**	**880**	**1717**	**1415**	**716**	**300**	**108**	**71**	**52.1**	**45.8**	**6.8**

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Number Vehicle Classes ARX Scheme Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	Vehicle Speed MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	P-Tile 85%	Average Speed	Standard Deviation
0000 - 0100	22	6	6	5	5	0	0	17	0	2	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	5	5	3	4	1	1	58.8	50.9	9.3
0100 - 0200	17	5	5	4	3	0	0	10	0	3	0	2	0	0	1	1	0	0	0	0	0	0	0	0	2	2	3	6	3	1	1	57.7	50.5	8.7
0200 - 0300	13	3	3	4	3	0	0	8	0	2	0	1	0	0	1	2	0	0	0	0	0	0	0	0	2	2	3	4	2	1	0	57.5	50.3	8.0
0300 - 0400	13	3	4	2	4	0	0	6	0	2	0	0	0	0	1	4	0	0	0	0	0	0	0	0	1	3	3	3	2	1	0	56.6	48.5	8.0
0400 - 0500	21	4	4	5	8	0	0	11	0	3	0	1	0	0	1	4	0	0	0	0	0	0	0	1	2	4	5	5	3	1	0	56.1	48.5	7.7
0500 - 0600	54	8	13	16	17	0	0	35	0	8	0	2	0	0	3	5	0	0	0	0	0	0	0	0	3	10	10	13	8	6	3	59.9	51.2	8.6
0600 - 0700	108	20	22	27	40	0	0	81	1	15	0	0	0	1	4	5	0	0	0	0	0	0	0	1	12	26	25	22	13	6	4	56.8	48.9	8.0
0700 - 0800	236	48	54	66	68	1	1	193	2	27	2	0	0	1	3	5	0	0	0	0	0	0	0	3	24	69	64	46	19	6	4	53.9	47.4	7.1
0800 - 0900	318	77	84	79	78	0	2	268	3	29	2	1	1	3	4	6	0	0	0	0	0	0	0	8	60	102	83	45	14	4	3	51.2	45.1	6.4
0900 - 1000	299	71	72	79	78	0	4	245	4	27	3	0	0	2	6	7	0	0	0	0	0	0	1	11	50	106	77	37	12	3	3	51.0	44.9	6.3
1000 - 1100	333	84	75	87	86	0	3	276	7	31	1	1	1	2	4	7	0	0	0	0	0	0	2	9	57	124	89	37	9	3	2	49.9	44.5	6.0
1100 - 1200	324	80	85	80	78	0	5	263	8	33	1	1	0	1	5	6	0	1	0	0	0	0	1	8	55	113	88	42	10	4	2	50.8	44.9	6.2
1200 - 1300	304	79	77	74	74	1	5	244	6	33	1	1	0	1	6	6	0	0	0	0	0	0	0	8	56	100	81	37	14	4	3	51.0	45.1	6.7
1300 - 1400	307	68	80	80	78	0	4	249	6	31	1	1	1	2	5	5	0	0	0	0	1	0	1	6	44	107	86	40	15	4	3	51.4	45.4	6.5
1400 - 1500	321	83	78	73	87	0	4	258	5	35	2	1	1	2	5	6	0	0	0	0	0	0	2	5	56	111	88	38	13	5	3	51.0	45.1	6.4
1500 - 1600	335	81	80	86	88	0	5	279	4	30	0	2	0	1	5	7	0	1	0	0	0	0	0	7	57	120	90	41	13	4	3	51.0	45.1	6.2
1600 - 1700	390	87	93	102	108	0	6	330	5	33	1	1	1	2	3	8	0	0	0	0	0	0	1	14	72	125	111	46	13	5	3	50.3	44.7	6.3
1700 - 1800	411	113	105	108	85	0	5	362	3	30	1	1	0	1	2	6	1	0	0	0	0	0	1	11	62	125	113	66	24	7	3	52.3	45.9	6.6
1800 - 1900	282	86	71	64	62	1	4	247	5	17	0	0	0	2	3	4	0	0	0	0	0	1	0	4	29	72	89	50	23	8	6	54.1	47.5	7.6
1900 - 2000	201	59	52	48	42	0	2	177	4	10	0	0	1	2	2	3	0	0	0	0	0	0	0	1	18	47	65	37	18	8	7	55.0	48.6	7.4
2000 - 2100	142	40	37	29	35	0	4	114	4	12	1	0	1	2	1	2	0	0	0	0	0	0	0	1	12	35	38	28	12	6	8	57.3	49.5	9.2
2100 - 2200	106	27	26	25	28	0	2	94	1	5	0	0	1	1	1	1	0	0	0	0	0	1	1	1	8	19	30	24	13	5	5	57.0	49.5	8.6
2200 - 2300	67	23	15	15	14	0	0	60	1	3	0	0	0	0	1	1	0	0	0	0	0	0	1	1	7	13	17	16	7	4	3	57.0	49.1	8.3
2300 - 0000	40	9	11	11	9	0	0	35	0	3	0	1	0	0	0	1	0	0	0	0	0	0	0	1	4	9	10	6	5	3	2	58.2	49.2	8.8
0700 - 1900	**3860**	**958**	**955**	**978**	**969**	**3**	**45**	**3214**	**59**	**355**	**17**	**10**	**5**	**21**	**51**	**74**	**3**	**3**	**0**	**1**	**2**	**2**	**9**	**93**	**621**	**1275**	**1058**	**525**	**179**	**58**	**38**	**51.4**	**45.4**	**6.6**
0600 - 2200	**4417**	**1105**	**1091**	**1107**	**1114**	**4**	**52**	**3679**	**69**	**397**	**18**	**11**	**8**	**28**	**59**	**84**	**3**	**4**	**0**	**1**	**2**	**3**	**10**	**97**	**670**	**1402**	**1217**	**636**	**235**	**83**	**61**	**52.1**	**45.9**	**6.9**
0600 - 0000	**4524**	**1137**	**1117**	**1133**	**1136**	**4**	**52**	**3774**	**71**	**403**	**18**	**12**	**9**	**29**	**60**	**86**	**3**	**4**	**0**	**1**	**2**	**3**	**11**	**99**	**682**	**1424**	**1244**	**658**	**247**	**90**	**66**	**52.1**	**45.9**	**7.0**
0000 - 0000	**4665**	**1166**	**1152**	**1170**	**1177**	**4**	**53**	**3861**	**72**	**423**	**19**	**19**	**9**	**29**	**67**	**102**	**3**	**4**	**0**	**1**	**2**	**3**	**12**	**101**	**692**	**1451**	**1273**	**690**	**268**	**101**	**71**	**52.6**	**46.1**	**7.1**

Virtual Week (1.00)

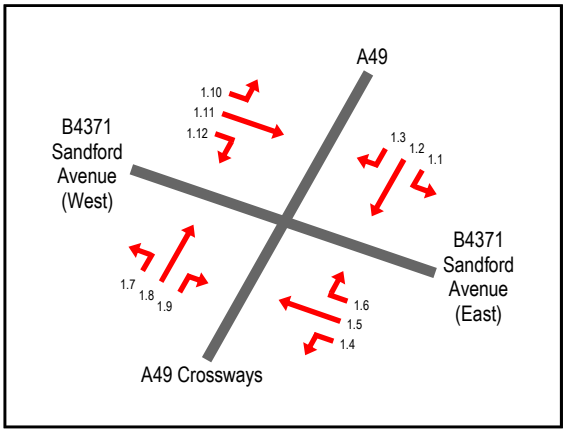
Time	Hourly Totals	15 Minute Bin Drops				Number Vehicle Classes ARX Scheme												Vehicle Speed													P-Tile	Average	Standard
		00-15	15-30	30-45	45-00	Cycles	Motor Cycles	Car Van	Car Van Towing	2 Axle Van Lorry	3 Axle Rigid	4 Axle Rigid	3 Axle Artic	4 Axle Artic	5 Axle Artic	6 Axle Artic	Double Road Train	Triple Road Train	MPH 0 <10mph	MPH 10 <15mph	MPH 15 <20mph	MPH 20 <25mph	MPH 25 <30mph	MPH 30 <35mph	MPH 35 <40mph	MPH 40 <45mph	MPH 45 <50mph	MPH 50 <55mph	MPH 55 <60mph	MPH 60 <65mph	MPH 65 <140mph	85%	Speed	Deviation
Mon	1249	337	314	302	296	4	21	1010	13	101	2	9	3	6	28	48	3	1	0	2	2	0	4	28	125	297	322	230	135	59	45	56.1	48.5	8.7
Tue	5196	1255	1297	1301	1343	2	50	4106	60	595	34	32	10	30	101	168	5	3	0	1	1	0	22	171	954	1677	1245	713	257	98	57	51.7	45.2	6.9
Wed	5318	1271	1294	1379	1374	7	49	4224	79	579	30	24	8	35	97	174	5	7	0	0	1	3	11	96	880	1717	1415	716	300	108	71	52.1	45.8	6.8
Thu	5185	1307	1330	1264	1284	3	33	4165	61	573	25	27	7	39	92	151	2	7	0	0	0	3	10	106	826	1665	1373	735	302	103	62	52.3	45.8	6.8
Fri	5943	1584	1460	1419	1480	2	60	4878	78	591	25	21	11	37	108	122	3	7	0	2	1	4	18	177	934	1922	1603	824	277	108	73	51.7	45.5	6.8
Sat	4665	1188	1154	1188	1135	1	66	4187	52	264	13	15	2	16	21	27	0	1	0	1	0	1	9	71	523	1348	1411	803	289	121	88	53.2	47.0	7.1
Sun	5100	1219	1216	1336	1329	8	92	4455	160	260	2	4	22	42	24	27	4	0	0	2	9	9	8	57	603	1528	1542	812	315	111	104	52.8	46.8	7.2

Classified Junction Count
Site 1 of 1

A49
B4371 Sandford Avenue
A49 Crossways

OSGR

52.537622°, -2.801432°



Church Stretton, Shropshire
Classified Junction Count

Site 1 of 1
A49
B4371 Sandford Avenue

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

Network Peak Hour Generator
click on yellow cell to change Peak Hour parameters

Session:	Weekday AM Peak
Vehicle Class:	ALL
Start Time:	07:30
End Time:	09:30

Note: The above site diagram is for reference purposes only and is not an exact representation of the site surveyed

Church Stretton, Shropshire
Classified Junction Count

Site 1 of 1
A49
B4371 Sandford Avenue
A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.1: Left from A49 to B4371 Sandford Avenue (East)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	4	0	1	0	1	0	6	7.30
0745 - 0800	0	0	5	0	3	0	0	0	8	8.00
0800 - 0815	0	0	5	0	2	1	0	0	8	8.50
0815 - 0830	0	0	3	0	2	1	0	0	6	6.50
Hourly Total	**0**	**0**	**17**	**0**	**8**	**2**	**1**	**0**	**28**	**30.30**
Hourly Average	**0.00**	**0.00**	**4.25**	**0.00**	**2.00**	**0.50**	**0.25**	**0.00**	**7.00**	**7.58**
0830 - 0845	0	0	2	0	2	1	0	0	5	5.50
0845 - 0900	0	0	14	0	2	1	0	0	17	17.50
0900 - 0915	0	0	5	0	3	1	0	0	9	9.50
0915 - 0930	0	0	5	0	0	1	0	0	6	6.50
Hourly Total	**0**	**0**	**26**	**0**	**7**	**4**	**0**	**0**	**37**	**39.00**
Hourly Average	**0.00**	**0.00**	**6.50**	**0.00**	**1.75**	**1.00**	**0.00**	**0.00**	**9.25**	**9.75**

AM Peak Total	**0**	**0**	**43**	**0**	**15**	**6**	**1**	**0**	**65**	**69.30**
AM Peak Average	**0.00**	**0.00**	**5.38**	**0.00**	**1.88**	**0.75**	**0.13**	**0.00**	**8.13**	**8.66**

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.1: Left from A49 to B4371 Sandford Avenue (East)								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	3	0	2	1	0	0	6	6.50
0830 - 0845	0	0	2	0	2	1	0	0	5	5.50
0845 - 0900	0	0	14	0	2	1	0	0	17	17.50
0900 - 0915	0	0	5	0	3	1	0	0	9	9.50
Peak Hour Total	**0**	**0**	**24**	**0**	**9**	**4**	**0**	**0**	**37**	**39.00**
Peak Hour Average	**0.00**	**0.00**	**6.00**	**0.00**	**2.25**	**1.00**	**0.00**	**0.00**	**9.25**	**9.75**

1600 - 1800 (Weekday PM Peak)

	Movement 1.1: Left from A49 to B4371 Sandford Avenue (East)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	12	0	1	0	0	0	13	13.00
1615 - 1630	0	0	21	0	1	1	0	0	23	23.50
1630 - 1645	0	0	8	0	0	2	0	1	11	13.00
1645 - 1700	0	0	16	0	2	0	0	0	18	18.00
Hourly Total	**0**	**0**	**57**	**0**	**4**	**3**	**0**	**1**	**65**	**67.50**
Hourly Average	**0.00**	**0.00**	**14.25**	**0.00**	**1.00**	**0.75**	**0.00**	**0.25**	**16.25**	**16.88**
1700 - 1715	0	0	10	0	3	0	0	0	13	13.00
1715 - 1730	0	0	14	0	1	0	0	0	15	15.00
1730 - 1745	0	1	16	0	0	0	0	0	17	16.40
1745 - 1800	0	0	16	0	2	0	0	0	18	18.00
Hourly Total	**0**	**1**	**56**	**0**	**6**	**0**	**0**	**0**	**63**	**62.40**
Hourly Average	**0.00**	**0.25**	**14.00**	**0.00**	**1.50**	**0.00**	**0.00**	**0.00**	**15.75**	**15.60**

PM Peak Total	**0**	**1**	**113**	**0**	**10**	**3**	**0**	**1**	**128**	**129.90**
PM Peak Average	**0.00**	**0.13**	**14.13**	**0.00**	**1.25**	**0.38**	**0.00**	**0.13**	**16.00**	**16.24**

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.1: Left from A49 to B4371 Sandford Avenue (East)								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	8	0	0	2	0	1	11	13.00
1645 - 1700	0	0	16	0	2	0	0	0	18	18.00
1700 - 1715	0	0	10	0	3	0	0	0	13	13.00
1715 - 1730	0	0	14	0	1	0	0	0	15	15.00
Peak Hour Total	**0**	**0**	**48**	**0**	**6**	**2**	**0**	**1**	**57**	**59.00**
Peak Hour Average	**0.00**	**0.00**	**12.00**	**0.00**	**1.50**	**0.50**	**0.00**	**0.25**	**14.25**	**14.75**

Church Stretton, Shropshire
Classified Junction Count

Site 1 of 1
A49
B4371 Sandford Avenue
A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.2: Southbound from A49 to A49 Crossways								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	1	32	0	9	0	8	0	50	59.80
0745 - 0800	0	0	40	0	21	4	7	1	73	85.10
0800 - 0815	0	0	38	0	9	9	7	0	63	76.60
0815 - 0830	0	1	58	0	16	4	2	0	81	85.00
Hourly Total	**0**	**2**	**168**	**0**	**55**	**17**	**24**	**1**	**267**	**306.50**
Hourly Average	**0.00**	**0.50**	**42.00**	**0.00**	**13.75**	**4.25**	**6.00**	**0.25**	**66.75**	**76.63**
0830 - 0845	0	0	49	0	14	6	5	0	74	83.50
0845 - 0900	0	0	57	0	7	7	7	0	78	90.60
0900 - 0915	0	0	42	0	13	8	7	0	70	83.10
0915 - 0930	0	3	32	0	11	4	0	0	50	50.20
Hourly Total	**0**	**3**	**180**	**0**	**45**	**25**	**19**	**0**	**272**	**307.40**
Hourly Average	**0.00**	**0.75**	**45.00**	**0.00**	**11.25**	**6.25**	**4.75**	**0.00**	**68.00**	**76.85**

AM Peak Total	**0**	**5**	**348**	**0**	**100**	**42**	**43**	**1**	**539**	**613.90**
AM Peak Average	**0.00**	**0.63**	**43.50**	**0.00**	**12.50**	**5.25**	**5.38**	**0.13**	**67.38**	**76.74**

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.2: Southbound from A49 to A49 Crossways								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	1	58	0	16	4	2	0	81	85.00
0830 - 0845	0	0	49	0	14	6	5	0	74	83.50
0845 - 0900	0	0	57	0	7	7	7	0	78	90.60
0900 - 0915	0	0	42	0	13	8	7	0	70	83.10
Peak Hour Total	**0**	**1**	**206**	**0**	**50**	**25**	**21**	**0**	**303**	**342.20**
Peak Hour Average	**0.00**	**0.25**	**51.50**	**0.00**	**12.50**	**6.25**	**5.25**	**0.00**	**75.75**	**85.55**

1600 - 1800 (Weekday PM Peak)

	Movement 1.2: Southbound from A49 to A49 Crossways								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	71	0	15	3	3	0	92	97.40
1615 - 1630	0	1	94	0	9	3	3	0	110	114.80
1630 - 1645	0	3	80	0	11	9	4	1	108	116.90
1645 - 1700	0	0	94	0	12	6	2	0	114	119.60
Hourly Total	**0**	**4**	**339**	**0**	**47**	**21**	**12**	**1**	**424**	**448.70**
Hourly Average	**0.00**	**1.00**	**84.75**	**0.00**	**11.75**	**5.25**	**3.00**	**0.25**	**106.00**	**112.18**
1700 - 1715	0	1	100	0	7	4	3	0	115	120.30
1715 - 1730	0	0	89	0	19	3	0	0	111	112.50
1730 - 1745	0	0	73	0	11	2	3	0	89	93.90
1745 - 1800	0	1	86	0	7	2	1	0	97	98.70
Hourly Total	**0**	**2**	**348**	**0**	**44**	**11**	**7**	**0**	**412**	**425.40**
Hourly Average	**0.00**	**0.50**	**87.00**	**0.00**	**11.00**	**2.75**	**1.75**	**0.00**	**103.00**	**106.35**

PM Peak Total	**0**	**6**	**687**	**0**	**91**	**32**	**19**	**1**	**836**	**874.10**
PM Peak Average	**0.00**	**0.75**	**85.88**	**0.00**	**11.38**	**4.00**	**2.38**	**0.13**	**104.50**	**109.26**

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.2: Southbound from A49 to A49 Crossways								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	3	80	0	11	9	4	1	108	116.90
1645 - 1700	0	0	94	0	12	6	2	0	114	119.60
1700 - 1715	0	1	100	0	7	4	3	0	115	120.30
1715 - 1730	0	0	89	0	19	3	0	0	111	112.50
Peak Hour Total	**0**	**4**	**363**	**0**	**49**	**22**	**9**	**1**	**448**	**469.30**
Peak Hour Average	**0.00**	**1.00**	**90.75**	**0.00**	**12.25**	**5.50**	**2.25**	**0.25**	**112.00**	**117.33**

Church Stretton, Shropshire
Classified Junction Count

Site 1 of 1
A49
B4371 Sandford Avenue
A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.3: Right from A49 to B4371 Sandford Avenue (West)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	10	0	2	0	0	0	12	12.00
0745 - 0800	0	0	7	0	4	2	0	0	13	14.00
0800 - 0815	0	0	8	0	2	1	0	0	11	11.50
0815 - 0830	0	0	13	0	3	0	0	0	16	16.00
Hourly Total	**0**	**0**	**38**	**0**	**11**	**3**	**0**	**0**	52	53.50
Hourly Average	**0.00**	**0.00**	**9.50**	**0.00**	**2.75**	**0.75**	**0.00**	**0.00**	13.00	13.38
0830 - 0845	0	1	18	0	2	1	0	0	22	21.90
0845 - 0900	0	0	31	0	4	1	0	0	36	36.50
0900 - 0915	0	0	15	0	4	0	0	0	19	19.00
0915 - 0930	0	0	6	0	1	0	0	0	7	7.00
Hourly Total	**0**	**1**	**70**	**0**	**11**	**2**	**0**	**0**	84	84.40
Hourly Average	**0.00**	**0.25**	**17.50**	**0.00**	**2.75**	**0.50**	**0.00**	**0.00**	21.00	21.10

AM Peak Total	**0**	**1**	**108**	**0**	**22**	**5**	**0**	**0**	136	137.90
AM Peak Average	**0.00**	**0.13**	**13.50**	**0.00**	**2.75**	**0.63**	**0.00**	**0.00**	17.00	17.24

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.3: Right from A49 to B4371 Sandford Avenue (West)								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	13	0	3	0	0	0	16	16.00
0830 - 0845	0	1	18	0	2	1	0	0	22	21.90
0845 - 0900	0	0	31	0	4	1	0	0	36	36.50
0900 - 0915	0	0	15	0	4	0	0	0	19	19.00
Peak Hour Total	**0**	**1**	**77**	**0**	**13**	**2**	**0**	**0**	93	93.40
Peak Hour Average	**0.00**	**0.25**	**19.25**	**0.00**	**3.25**	**0.50**	**0.00**	**0.00**	23.25	23.35

1600 - 1800 (Weekday PM Peak)

	Movement 1.3: Right from A49 to B4371 Sandford Avenue (West)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	17	0	2	0	0	0	19	19.00
1615 - 1630	0	0	17	0	0	0	0	0	17	17.00
1630 - 1645	0	1	23	0	0	2	0	0	26	26.40
1645 - 1700	0	0	21	0	3	0	0	0	24	24.00
Hourly Total	**0**	**1**	**78**	**0**	**5**	**2**	**0**	**0**	86	86.40
Hourly Average	**0.00**	**0.25**	**19.50**	**0.00**	**1.25**	**0.50**	**0.00**	**0.00**	21.50	21.60
1700 - 1715	0	1	17	0	1	0	0	0	19	18.40
1715 - 1730	0	0	19	0	4	0	0	0	23	23.00
1730 - 1745	0	1	10	0	1	3	0	0	15	15.90
1745 - 1800	0	1	25	0	3	0	0	0	29	28.40
Hourly Total	**0**	**3**	**71**	**0**	**9**	**3**	**0**	**0**	86	85.70
Hourly Average	**0.00**	**0.75**	**17.75**	**0.00**	**2.25**	**0.75**	**0.00**	**0.00**	21.50	21.43

PM Peak Total	**0**	**4**	**149**	**0**	**14**	**5**	**0**	**0**	172	172.10
PM Peak Average	**0.00**	**0.50**	**18.63**	**0.00**	**1.75**	**0.63**	**0.00**	**0.00**	21.50	21.51

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.3: Right from A49 to B4371 Sandford Avenue (West)								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	1	23	0	0	2	0	0	26	26.40
1645 - 1700	0	0	21	0	3	0	0	0	24	24.00
1700 - 1715	0	1	17	0	1	0	0	0	19	18.40
1715 - 1730	0	0	19	0	4	0	0	0	23	23.00
Peak Hour Total	**0**	**2**	**80**	**0**	**8**	**2**	**0**	**0**	92	91.80
Peak Hour Average	**0.00**	**0.50**	**20.00**	**0.00**	**2.00**	**0.50**	**0.00**	**0.00**	23.00	22.95

Church Stretton, Shropshire
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Site 1 of 1
A49
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A49 Crossways

Lat/Long
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Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.4: Left from B4371 Sandford Avenue (East) to A49 Crossways								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	5	0	1	1	0	0	7	7.50
0745 - 0800	0	1	8	0	1	1	0	0	11	10.90
0800 - 0815	0	0	7	0	0	0	0	0	7	7.00
0815 - 0830	0	0	14	0	0	1	0	0	15	15.50
Hourly Total	**0**	**1**	**34**	**0**	**2**	**3**	**0**	**0**	40	40.90
Hourly Average	**0.00**	**0.25**	**8.50**	**0.00**	**0.50**	**0.75**	**0.00**	**0.00**	**10.00**	**10.23**
0830 - 0845	0	0	8	0	0	0	1	0	9	10.30
0845 - 0900	0	0	12	0	2	1	0	0	15	15.50
0900 - 0915	0	0	4	0	1	0	0	0	5	5.00
0915 - 0930	0	0	10	0	3	1	1	1	16	18.80
Hourly Total	**0**	**0**	**34**	**0**	**6**	**2**	**2**	**1**	45	49.60
Hourly Average	**0.00**	**0.00**	**8.50**	**0.00**	**1.50**	**0.50**	**0.50**	**0.25**	**11.25**	**12.40**

AM Peak Total	**0**	**1**	**68**	**0**	**8**	**5**	**2**	**1**	85	90.50
AM Peak Average	**0.00**	**0.13**	**8.50**	**0.00**	**1.00**	**0.63**	**0.25**	**0.13**	**10.63**	**11.31**

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.4: Left from B4371 Sandford Avenue (East) to A49 Crossways								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	14	0	0	1	0	0	15	15.50
0830 - 0845	0	0	8	0	0	0	1	0	9	10.30
0845 - 0900	0	0	12	0	2	1	0	0	15	15.50
0900 - 0915	0	0	4	0	1	0	0	0	5	5.00
Peak Hour Total	**0**	**0**	**38**	**0**	**3**	**2**	**1**	**0**	44	46.30
Peak Hour Average	**0.00**	**0.00**	**9.50**	**0.00**	**0.75**	**0.50**	**0.25**	**0.00**	**11.00**	**11.58**

1600 - 1800 (Weekday PM Peak)

	Movement 1.4: Left from B4371 Sandford Avenue (East) to A49 Crossways								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	5	0	3	1	0	0	9	9.50
1615 - 1630	0	0	19	0	0	0	0	0	19	19.00
1630 - 1645	0	0	11	0	0	0	0	0	11	11.00
1645 - 1700	0	0	10	0	1	0	0	0	11	11.00
Hourly Total	**0**	**0**	**45**	**0**	**4**	**1**	**0**	**0**	50	50.50
Hourly Average	**0.00**	**0.00**	**11.25**	**0.00**	**1.00**	**0.25**	**0.00**	**0.00**	**12.50**	**12.63**
1700 - 1715	0	0	6	0	3	1	0	0	10	10.50
1715 - 1730	0	0	7	0	2	1	0	0	10	10.50
1730 - 1745	0	0	8	0	0	0	0	0	8	8.00
1745 - 1800	0	0	15	0	1	0	0	0	16	16.00
Hourly Total	**0**	**0**	**36**	**0**	**6**	**2**	**0**	**0**	44	45.00
Hourly Average	**0.00**	**0.00**	**9.00**	**0.00**	**1.50**	**0.50**	**0.00**	**0.00**	**11.00**	**11.25**

PM Peak Total	**0**	**0**	**81**	**0**	**10**	**3**	**0**	**0**	94	95.50
PM Peak Average	**0.00**	**0.00**	**10.13**	**0.00**	**1.25**	**0.38**	**0.00**	**0.00**	**11.75**	**11.94**

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.4: Left from B4371 Sandford Avenue (East) to A49 Crossways								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	11	0	0	0	0	0	11	11.00
1645 - 1700	0	0	10	0	1	0	0	0	11	11.00
1700 - 1715	0	0	6	0	3	1	0	0	10	10.50
1715 - 1730	0	0	7	0	2	1	0	0	10	10.50
Peak Hour Total	**0**	**0**	**34**	**0**	**6**	**2**	**0**	**0**	42	43.00
Peak Hour Average	**0.00**	**0.00**	**8.50**	**0.00**	**1.50**	**0.50**	**0.00**	**0.00**	**10.50**	**10.75**

Church Stretton, Shropshire
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A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.5: Westbound on B4371 Sandford Avenue								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	1	0	9	0	5	0	0	0	15	14.20
0745 - 0800	2	0	13	0	3	0	0	0	18	16.40
0800 - 0815	1	0	20	0	3	0	0	0	24	23.20
0815 - 0830	2	0	26	0	2	0	0	0	30	28.40
Hourly Total	6	0	68	0	13	0	0	0	87	82.20
Hourly Average	1.50	0.00	17.00	0.00	3.25	0.00	0.00	0.00	21.75	20.55
0830 - 0845	2	0	52	0	2	0	0	2	58	58.40
0845 - 0900	0	0	43	0	1	0	0	0	44	44.00
0900 - 0915	0	0	25	0	4	0	0	0	29	29.00
0915 - 0930	1	2	36	0	3	0	0	0	42	40.00
Hourly Total	3	2	156	0	10	0	0	2	173	171.40
Hourly Average	0.75	0.50	39.00	0.00	2.50	0.00	0.00	0.50	43.25	42.85

AM Peak Total	9	2	224	0	23	0	0	2	260	253.60
AM Peak Average	1.13	0.25	28.00	0.00	2.88	0.00	0.00	0.25	32.50	31.70

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.5: Westbound on B4371 Sandford Avenue								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	2	0	26	0	2	0	0	0	30	28.40
0830 - 0845	2	0	52	0	2	0	0	2	58	58.40
0845 - 0900	0	0	43	0	1	0	0	0	44	44.00
0900 - 0915	0	0	25	0	4	0	0	0	29	29.00
Peak Hour Total	4	0	146	0	9	0	0	2	161	159.80
Peak Hour Average	1.00	0.00	36.50	0.00	2.25	0.00	0.00	0.50	40.25	39.95

1600 - 1800 (Weekday PM Peak)

	Movement 1.5: Westbound on B4371 Sandford Avenue								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	1	0	27	0	2	0	0	0	30	29.20
1615 - 1630	1	1	16	0	2	0	0	0	20	18.60
1630 - 1645	1	0	23	0	4	0	0	0	28	27.20
1645 - 1700	0	0	29	0	2	0	0	0	31	31.00
Hourly Total	3	1	95	0	10	0	0	0	109	106.00
Hourly Average	0.75	0.25	23.75	0.00	2.50	0.00	0.00	0.00	27.25	26.50
1700 - 1715	2	0	22	0	3	0	0	0	27	25.40
1715 - 1730	4	1	38	0	0	1	0	0	44	40.70
1730 - 1745	2	0	32	0	3	0	0	0	37	35.40
1745 - 1800	0	0	26	0	1	0	0	0	27	27.00
Hourly Total	8	1	118	0	7	1	0	0	135	128.50
Hourly Average	2.00	0.25	29.50	0.00	1.75	0.25	0.00	0.00	33.75	32.13

PM Peak Total	11	2	213	0	17	1	0	0	244	234.50
PM Peak Average	1.38	0.25	26.63	0.00	2.13	0.13	0.00	0.00	30.50	29.31

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.5: Westbound on B4371 Sandford Avenue								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	1	0	23	0	4	0	0	0	28	27.20
1645 - 1700	0	0	29	0	2	0	0	0	31	31.00
1700 - 1715	2	0	22	0	3	0	0	0	27	25.40
1715 - 1730	4	1	38	0	0	1	0	0	44	40.70
Peak Hour Total	7	1	112	0	9	1	0	0	130	124.30
Peak Hour Average	1.75	0.25	28.00	0.00	2.25	0.25	0.00	0.00	32.50	31.08

Church Stretton, Shropshire
Classified Junction Count

Site 1 of 1
A49
B4371 Sandford Avenue
A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.6: Right from B4371 Sandford Avenue (East) to A49								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	10	0	2	0	0	0	12	12.00
0745 - 0800	0	1	17	0	1	0	0	1	20	20.40
0800 - 0815	0	0	20	0	0	0	0	0	20	20.00
0815 - 0830	0	0	11	0	2	0	0	0	13	13.00
Hourly Total	**0**	**1**	**58**	**0**	**5**	**0**	**0**	**1**	65	65.40
Hourly Average	**0.00**	**0.25**	**14.50**	**0.00**	**1.25**	**0.00**	**0.00**	**0.25**	16.25	16.35
0830 - 0845	0	0	11	0	1	2	0	0	14	15.00
0845 - 0900	0	0	13	0	1	3	0	0	17	18.50
0900 - 0915	0	0	10	0	0	0	0	0	10	10.00
0915 - 0930	0	0	18	0	0	1	0	0	19	19.50
Hourly Total	**0**	**0**	**52**	**0**	**2**	**6**	**0**	**0**	60	63.00
Hourly Average	**0.00**	**0.00**	**13.00**	**0.00**	**0.50**	**1.50**	**0.00**	**0.00**	15.00	15.75

AM Peak Total	**0**	**1**	**110**	**0**	**7**	**6**	**0**	**1**	125	128.40
AM Peak Average	**0.00**	**0.13**	**13.75**	**0.00**	**0.88**	**0.75**	**0.00**	**0.13**	15.63	16.05

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.6: Right from B4371 Sandford Avenue (East) to A49								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	11	0	2	0	0	0	13	13.00
0830 - 0845	0	0	11	0	1	2	0	0	14	15.00
0845 - 0900	0	0	13	0	1	3	0	0	17	18.50
0900 - 0915	0	0	10	0	0	0	0	0	10	10.00
Peak Hour Total	**0**	**0**	**45**	**0**	**4**	**5**	**0**	**0**	54	56.50
Peak Hour Average	**0.00**	**0.00**	**11.25**	**0.00**	**1.00**	**1.25**	**0.00**	**0.00**	13.50	14.13

1600 - 1800 (Weekday PM Peak)

	Movement 1.6: Right from B4371 Sandford Avenue (East) to A49								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	10	0	3	0	0	0	13	13.00
1615 - 1630	0	1	9	0	1	0	0	0	11	10.40
1630 - 1645	0	0	7	0	5	0	0	0	12	12.00
1645 - 1700	0	0	3	0	1	0	0	0	4	4.00
Hourly Total	**0**	**1**	**29**	**0**	**10**	**0**	**0**	**0**	40	39.40
Hourly Average	**0.00**	**0.25**	**7.25**	**0.00**	**2.50**	**0.00**	**0.00**	**0.00**	10.00	9.85
1700 - 1715	0	0	8	0	1	0	0	0	9	9.00
1715 - 1730	0	0	8	0	1	3	0	0	12	13.50
1730 - 1745	0	0	6	0	3	0	0	0	9	9.00
1745 - 1800	0	0	9	0	2	0	0	0	11	11.00
Hourly Total	**0**	**0**	**31**	**0**	**7**	**3**	**0**	**0**	41	42.50
Hourly Average	**0.00**	**0.00**	**7.75**	**0.00**	**1.75**	**0.75**	**0.00**	**0.00**	10.25	10.63

PM Peak Total	**0**	**1**	**60**	**0**	**17**	**3**	**0**	**0**	81	81.90
PM Peak Average	**0.00**	**0.13**	**7.50**	**0.00**	**2.13**	**0.38**	**0.00**	**0.00**	10.13	10.24

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.6: Right from B4371 Sandford Avenue (East) to A49								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	7	0	5	0	0	0	12	12.00
1645 - 1700	0	0	3	0	1	0	0	0	4	4.00
1700 - 1715	0	0	8	0	1	0	0	0	9	9.00
1715 - 1730	0	0	8	0	1	3	0	0	12	13.50
Peak Hour Total	**0**	**0**	**26**	**0**	**8**	**3**	**0**	**0**	37	38.50
Peak Hour Average	**0.00**	**0.00**	**6.50**	**0.00**	**2.00**	**0.75**	**0.00**	**0.00**	9.25	9.63

Church Stretton, Shropshire
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Site 1 of 1
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Friday 20 June 2014

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Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.7: Left from A49 Crossways to B4371 Sandford Avenue (West)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	10	0	1	1	0	0	12	12.50
0745 - 0800	0	0	19	0	4	0	0	0	23	23.00
0800 - 0815	0	0	23	0	1	0	1	0	25	26.30
0815 - 0830	0	0	23	0	4	0	0	0	27	27.00
Hourly Total	**0**	**0**	**75**	**0**	**10**	**1**	**1**	**0**	87	88.80
Hourly Average	**0.00**	**0.00**	**18.75**	**0.00**	**2.50**	**0.25**	**0.25**	**0.00**	21.75	22.20
0830 - 0845	0	0	45	0	1	1	0	2	49	51.50
0845 - 0900	0	0	59	0	0	0	1	0	60	61.30
0900 - 0915	0	1	24	0	2	1	0	0	28	27.90
0915 - 0930	0	3	18	0	3	2	0	0	26	25.20
Hourly Total	**0**	**4**	**146**	**0**	**6**	**4**	**1**	**2**	163	165.90
Hourly Average	**0.00**	**1.00**	**36.50**	**0.00**	**1.50**	**1.00**	**0.25**	**0.50**	40.75	41.48

AM Peak Total	**0**	**4**	**221**	**0**	**16**	**5**	**2**	**2**	250	254.70
AM Peak Average	**0.00**	**0.50**	**27.63**	**0.00**	**2.00**	**0.63**	**0.25**	**0.25**	31.25	31.84

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.7: Left from A49 Crossways to B4371 Sandford Avenue (West)								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	23	0	4	0	0	0	27	27.00
0830 - 0845	0	0	45	0	1	1	0	2	49	51.50
0845 - 0900	0	0	59	0	0	0	1	0	60	61.30
0900 - 0915	0	1	24	0	2	1	0	0	28	27.90
Peak Hour Total	**0**	**1**	**151**	**0**	**7**	**2**	**1**	**2**	164	167.70
Peak Hour Average	**0.00**	**0.25**	**37.75**	**0.00**	**1.75**	**0.50**	**0.25**	**0.50**	41.00	41.93

1600 - 1800 (Weekday PM Peak)

	Movement 1.7: Left from A49 Crossways to B4371 Sandford Avenue (West)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	20	0	1	0	0	0	21	21.00
1615 - 1630	0	1	28	0	2	0	0	0	31	30.40
1630 - 1645	0	0	21	0	3	0	0	0	24	24.00
1645 - 1700	0	0	28	0	1	1	0	0	30	30.50
Hourly Total	**0**	**1**	**97**	**0**	**7**	**1**	**0**	**0**	106	105.90
Hourly Average	**0.00**	**0.25**	**24.25**	**0.00**	**1.75**	**0.25**	**0.00**	**0.00**	26.50	26.48
1700 - 1715	0	1	42	0	2	1	0	0	46	45.90
1715 - 1730	1	1	40	0	2	0	0	0	44	42.60
1730 - 1745	0	0	24	0	2	0	0	0	26	26.00
1745 - 1800	0	0	37	0	2	0	0	0	39	39.00
Hourly Total	**1**	**2**	**143**	**0**	**8**	**1**	**0**	**0**	155	153.50
Hourly Average	**0.25**	**0.50**	**35.75**	**0.00**	**2.00**	**0.25**	**0.00**	**0.00**	38.75	38.38

PM Peak Total	**1**	**3**	**240**	**0**	**15**	**2**	**0**	**0**	261	259.40
PM Peak Average	**0.13**	**0.38**	**30.00**	**0.00**	**1.88**	**0.25**	**0.00**	**0.00**	32.63	32.43

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.7: Left from A49 Crossways to B4371 Sandford Avenue (West)								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	21	0	3	0	0	0	24	24.00
1645 - 1700	0	0	28	0	1	1	0	0	30	30.50
1700 - 1715	0	1	42	0	2	1	0	0	46	45.90
1715 - 1730	1	1	40	0	2	0	0	0	44	42.60
Peak Hour Total	**1**	**2**	**131**	**0**	**8**	**2**	**0**	**0**	144	143.00
Peak Hour Average	**0.25**	**0.50**	**32.75**	**0.00**	**2.00**	**0.50**	**0.00**	**0.00**	36.00	35.75

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Friday 20 June 2014

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Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.8: Northbound from A49 Crossways to A49								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	41	0	10	5	7	0	63	74.60
0745 - 0800	1	0	40	0	10	4	2	0	57	60.80
0800 - 0815	0	0	61	0	8	8	5	0	82	92.50
0815 - 0830	0	0	70	0	6	4	2	0	82	86.60
Hourly Total	1	0	212	0	34	21	16	0	284	314.50
Hourly Average	0.25	0.00	53.00	0.00	8.50	5.25	4.00	0.00	71.00	78.63
0830 - 0845	0	0	57	0	3	2	9	0	71	83.70
0845 - 0900	0	1	53	0	8	4	5	1	72	80.90
0900 - 0915	0	3	40	0	3	2	4	0	52	56.40
0915 - 0930	0	0	55	0	9	1	3	0	68	72.40
Hourly Total	0	4	205	0	23	9	21	1	263	293.40
Hourly Average	0.00	1.00	51.25	0.00	5.75	2.25	5.25	0.25	65.75	73.35

AM Peak Total	1	4	417	0	57	30	37	1	547	607.90
AM Peak Average	0.13	0.50	52.13	0.00	7.13	3.75	4.63	0.13	68.38	75.99

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.8: Northbound from A49 Crossways to A49								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	70	0	6	4	2	0	82	86.60
0830 - 0845	0	0	57	0	3	2	9	0	71	83.70
0845 - 0900	0	1	53	0	8	4	5	1	72	80.90
0900 - 0915	0	3	40	0	3	2	4	0	52	56.40
Peak Hour Total	0	4	220	0	20	12	20	1	277	307.60
Peak Hour Average	0.00	1.00	55.00	0.00	5.00	3.00	5.00	0.25	69.25	76.90

1600 - 1800 (Weekday PM Peak)

	Movement 1.8: Northbound from A49 Crossways to A49								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	2	60	0	4	2	6	1	75	83.60
1615 - 1630	0	0	89	0	15	6	5	1	116	126.50
1630 - 1645	0	4	81	0	7	4	3	0	99	102.50
1645 - 1700	0	4	74	0	8	0	3	0	89	90.50
Hourly Total	0	10	304	0	34	12	17	2	379	403.10
Hourly Average	0.00	2.50	76.00	0.00	8.50	3.00	4.25	0.50	94.75	100.78
1700 - 1715	0	1	104	0	15	6	3	2	131	139.30
1715 - 1730	0	0	66	0	9	2	3	0	80	84.90
1730 - 1745	0	0	73	0	13	2	5	0	93	100.50
1745 - 1800	0	1	77	0	9	2	5	1	95	102.90
Hourly Total	0	2	320	0	46	12	16	3	399	427.60
Hourly Average	0.00	0.50	80.00	0.00	11.50	3.00	4.00	0.75	99.75	106.90

PM Peak Total	0	12	624	0	80	24	33	5	778	830.70
PM Peak Average	0.00	1.50	78.00	0.00	10.00	3.00	4.13	0.63	97.25	103.84

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.8: Northbound from A49 Crossways to A49								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	4	81	0	7	4	3	0	99	102.50
1645 - 1700	0	4	74	0	8	0	3	0	89	90.50
1700 - 1715	0	1	104	0	15	6	3	2	131	139.30
1715 - 1730	0	0	66	0	9	2	3	0	80	84.90
Peak Hour Total	0	9	325	0	39	12	12	2	399	417.20
Peak Hour Average	0.00	2.25	81.25	0.00	9.75	3.00	3.00	0.50	99.75	104.30

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0730 - 0930 (Weekday AM Peak)

	Movement 1.9: Right from A49 Crossways to B4371 Sandford Avenue (East)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	5	0	0	2	0	0	7	8.00
0745 - 0800	0	0	4	0	2	0	0	0	6	6.00
0800 - 0815	0	0	3	0	4	2	0	0	9	10.00
0815 - 0830	0	0	8	0	6	0	1	0	15	16.30
Hourly Total	**0**	**0**	**20**	**0**	**12**	**4**	**1**	**0**	37	40.30
Hourly Average	**0.00**	**0.00**	**5.00**	**0.00**	**3.00**	**1.00**	**0.25**	**0.00**	9.25	10.08
0830 - 0845	0	0	5	0	1	1	0	0	7	7.50
0845 - 0900	0	0	4	0	2	1	0	0	7	7.50
0900 - 0915	0	0	7	0	1	1	0	0	9	9.50
0915 - 0930	0	1	9	0	0	1	0	0	11	10.90
Hourly Total	**0**	**1**	**25**	**0**	**4**	**4**	**0**	**0**	34	35.40
Hourly Average	**0.00**	**0.25**	**6.25**	**0.00**	**1.00**	**1.00**	**0.00**	**0.00**	8.50	8.85

AM Peak Total	**0**	**1**	**45**	**0**	**16**	**8**	**1**	**0**	71	75.70
AM Peak Average	**0.00**	**0.13**	**5.63**	**0.00**	**2.00**	**1.00**	**0.13**	**0.00**	8.88	9.46

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.9: Right from A49 Crossways to B4371 Sandford Avenue (East)								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	8	0	6	0	1	0	15	16.30
0830 - 0845	0	0	5	0	1	1	0	0	7	7.50
0845 - 0900	0	0	4	0	2	1	0	0	7	7.50
0900 - 0915	0	0	7	0	1	1	0	0	9	9.50
Peak Hour Total	**0**	**0**	**24**	**0**	**10**	**3**	**1**	**0**	38	40.80
Peak Hour Average	**0.00**	**0.00**	**6.00**	**0.00**	**2.50**	**0.75**	**0.25**	**0.00**	9.50	10.20

1600 - 1800 (Weekday PM Peak)

	Movement 1.9: Right from A49 Crossways to B4371 Sandford Avenue (East)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	8	0	1	0	0	0	9	9.00
1615 - 1630	0	0	7	0	0	0	0	0	7	7.00
1630 - 1645	0	0	11	0	1	0	0	0	12	12.00
1645 - 1700	0	0	5	0	1	0	0	0	6	6.00
Hourly Total	**0**	**0**	**31**	**0**	**3**	**0**	**0**	**0**	34	34.00
Hourly Average	**0.00**	**0.00**	**7.75**	**0.00**	**0.75**	**0.00**	**0.00**	**0.00**	8.50	8.50
1700 - 1715	0	0	11	0	1	0	0	0	12	12.00
1715 - 1730	0	0	13	0	1	1	0	0	15	15.50
1730 - 1745	0	1	12	0	1	0	0	0	14	13.40
1745 - 1800	0	0	9	0	1	0	1	0	11	12.30
Hourly Total	**0**	**1**	**45**	**0**	**4**	**1**	**1**	**0**	52	53.20
Hourly Average	**0.00**	**0.25**	**11.25**	**0.00**	**1.00**	**0.25**	**0.25**	**0.00**	13.00	13.30

PM Peak Total	**0**	**1**	**76**	**0**	**7**	**1**	**1**	**0**	86	87.20
PM Peak Average	**0.00**	**0.13**	**9.50**	**0.00**	**0.88**	**0.13**	**0.13**	**0.00**	10.75	10.90

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.9: Right from A49 Crossways to B4371 Sandford Avenue (East)								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	11	0	1	0	0	0	12	12.00
1645 - 1700	0	0	5	0	1	0	0	0	6	6.00
1700 - 1715	0	0	11	0	1	0	0	0	12	12.00
1715 - 1730	0	0	13	0	1	1	0	0	15	15.50
Peak Hour Total	**0**	**0**	**40**	**0**	**4**	**1**	**0**	**0**	45	45.50
Peak Hour Average	**0.00**	**0.00**	**10.00**	**0.00**	**1.00**	**0.25**	**0.00**	**0.00**	11.25	11.38

Church Stretton, Shropshire
Classified Junction Count

Site 1 of 1
A49
B4371 Sandford Avenue
A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.10: Left from B4371 Sandford Avenue (West) to A49								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	9	0	2	0	0	0	11	11.00
0745 - 0800	0	0	13	0	0	0	0	0	13	13.00
0800 - 0815	0	0	10	0	2	1	0	0	13	13.50
0815 - 0830	0	0	17	0	0	1	0	0	18	18.50
Hourly Total	0	0	49	0	4	2	0	0	55	56.00
Hourly Average	0.00	0.00	12.25	0.00	1.00	0.50	0.00	0.00	13.75	14.00
0830 - 0845	0	1	11	0	0	1	1	0	14	15.20
0845 - 0900	0	0	17	0	4	0	0	1	22	23.00
0900 - 0915	0	0	17	0	1	0	0	1	19	20.00
0915 - 0930	0	0	13	0	2	0	0	0	15	15.00
Hourly Total	0	1	58	0	7	1	1	2	70	73.20
Hourly Average	0.00	0.25	14.50	0.00	1.75	0.25	0.25	0.50	17.50	18.30

AM Peak Total	0	1	107	0	11	3	1	2	125	129.20
AM Peak Average	0.00	0.13	13.38	0.00	1.38	0.38	0.13	0.25	15.63	16.15

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.10: Left from B4371 Sandford Avenue (West) to A49								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	17	0	0	1	0	0	18	18.50
0830 - 0845	0	1	11	0	0	1	1	0	14	15.20
0845 - 0900	0	0	17	0	4	0	0	1	22	23.00
0900 - 0915	0	0	17	0	1	0	0	1	19	20.00
Peak Hour Total	0	1	62	0	5	2	1	2	73	76.70
Peak Hour Average	0.00	0.25	15.50	0.00	1.25	0.50	0.25	0.50	18.25	19.18

1600 - 1800 (Weekday PM Peak)

	Movement 1.10: Left from B4371 Sandford Avenue (West) to A49								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	10	0	2	0	2	0	14	16.60
1615 - 1630	0	0	14	0	0	0	0	0	14	14.00
1630 - 1645	0	0	18	0	0	0	0	0	18	18.00
1645 - 1700	0	0	19	0	2	0	0	0	21	21.00
Hourly Total	0	0	61	0	4	0	2	0	67	69.60
Hourly Average	0.00	0.00	15.25	0.00	1.00	0.00	0.50	0.00	16.75	17.40
1700 - 1715	0	1	35	0	1	0	0	0	37	36.40
1715 - 1730	0	0	21	0	3	0	0	0	24	24.00
1730 - 1745	0	0	19	0	2	0	0	0	21	21.00
1745 - 1800	0	1	14	0	1	0	0	0	16	15.40
Hourly Total	0	2	89	0	7	0	0	0	98	96.80
Hourly Average	0.00	0.50	22.25	0.00	1.75	0.00	0.00	0.00	24.50	24.20

PM Peak Total	0	2	150	0	11	0	2	0	165	166.40
PM Peak Average	0.00	0.25	18.75	0.00	1.38	0.00	0.25	0.00	20.63	20.80

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.10: Left from B4371 Sandford Avenue (West) to A49								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	18	0	0	0	0	0	18	18.00
1645 - 1700	0	0	19	0	2	0	0	0	21	21.00
1700 - 1715	0	1	35	0	1	0	0	0	37	36.40
1715 - 1730	0	0	21	0	3	0	0	0	24	24.00
Peak Hour Total	0	1	93	0	6	0	0	0	100	99.40
Peak Hour Average	0.00	0.25	23.25	0.00	1.50	0.00	0.00	0.00	25.00	24.85

Church Stretton, Shropshire
Classified Junction Count

Site 1 of 1
A49
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A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.11: Eastbound on B4371 Sandford Avenue								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	1	0	9	0	2	1	0	0	13	12.70
0745 - 0800	0	0	14	0	0	0	0	0	14	14.00
0800 - 0815	0	0	20	0	3	0	0	0	23	23.00
0815 - 0830	1	0	19	0	0	0	0	0	20	19.20
Hourly Total	2	0	62	0	5	1	0	0	70	68.90
Hourly Average	0.50	0.00	15.50	0.00	1.25	0.25	0.00	0.00	17.50	17.23
0830 - 0845	0	0	16	0	0	1	0	0	17	17.50
0845 - 0900	0	0	20	0	1	1	0	1	23	24.50
0900 - 0915	0	0	22	0	1	0	0	0	23	23.00
0915 - 0930	1	0	20	0	3	0	0	0	24	23.20
Hourly Total	1	0	78	0	5	2	0	1	87	88.20
Hourly Average	0.25	0.00	19.50	0.00	1.25	0.50	0.00	0.25	21.75	22.05

AM Peak Total	3	0	140	0	10	3	0	1	157	157.10
AM Peak Average	0.38	0.00	17.50	0.00	1.25	0.38	0.00	0.13	19.63	19.64

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.11: Eastbound on B4371 Sandford Avenue								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	1	0	19	0	0	0	0	0	20	19.20
0830 - 0845	0	0	16	0	0	1	0	0	17	17.50
0845 - 0900	0	0	20	0	1	1	0	1	23	24.50
0900 - 0915	0	0	22	0	1	0	0	0	23	23.00
Peak Hour Total	1	0	77	0	2	2	0	1	83	84.20
Peak Hour Average	0.25	0.00	19.25	0.00	0.50	0.50	0.00	0.25	20.75	21.05

1600 - 1800 (Weekday PM Peak)

	Movement 1.11: Eastbound on B4371 Sandford Avenue								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	2	0	26	0	1	2	1	0	32	32.70
1615 - 1630	0	1	25	0	0	0	0	0	26	25.40
1630 - 1645	1	0	36	0	2	0	0	0	39	38.20
1645 - 1700	1	1	20	0	4	0	0	0	26	24.60
Hourly Total	4	2	107	0	7	2	1	0	123	120.90
Hourly Average	1.00	0.50	26.75	0.00	1.75	0.50	0.25	0.00	30.75	30.23
1700 - 1715	2	1	42	0	4	0	1	0	50	49.10
1715 - 1730	0	1	41	0	2	0	0	1	45	45.40
1730 - 1745	0	0	41	0	1	0	0	0	42	42.00
1745 - 1800	3	0	24	0	5	0	0	0	32	29.60
Hourly Total	5	2	148	0	12	0	1	1	169	166.10
Hourly Average	1.25	0.50	37.00	0.00	3.00	0.00	0.25	0.25	42.25	41.53

PM Peak Total	9	4	255	0	19	2	2	1	292	287.00
PM Peak Average	1.13	0.50	31.88	0.00	2.38	0.25	0.25	0.13	36.50	35.88

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.11: Eastbound on B4371 Sandford Avenue								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	1	0	36	0	2	0	0	0	39	38.20
1645 - 1700	1	1	20	0	4	0	0	0	26	24.60
1700 - 1715	2	1	42	0	4	0	1	0	50	49.10
1715 - 1730	0	1	41	0	2	0	0	1	45	45.40
Peak Hour Total	4	3	139	0	12	0	1	1	160	157.30
Peak Hour Average	1.00	0.75	34.75	0.00	3.00	0.00	0.25	0.25	40.00	39.33

Church Stretton, Shropshire
Classified Junction Count

Site 1 of 1
A49
B4371 Sandford Avenue
A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C

0730 - 0930 (Weekday AM Peak)

	Movement 1.12: Right from B4371 Sandford Avenue (West) to A49 Crossways								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	1	6	0	3	1	0	0	11	10.90
0745 - 0800	0	0	14	0	3	1	0	0	18	18.50
0800 - 0815	0	0	14	0	3	1	0	0	18	18.50
0815 - 0830	0	0	16	0	2	0	0	0	18	18.00
Hourly Total	**0**	**1**	**50**	**0**	**11**	**3**	**0**	**0**	65	65.90
Hourly Average	**0.00**	**0.25**	**12.50**	**0.00**	**2.75**	**0.75**	**0.00**	**0.00**	16.25	16.48
0830 - 0845	0	0	16	0	1	1	0	1	19	20.50
0845 - 0900	0	1	37	0	4	0	0	3	45	47.40
0900 - 0915	0	0	27	0	6	1	0	0	34	34.50
0915 - 0930	0	1	19	0	1	1	0	0	22	21.90
Hourly Total	**0**	**2**	**99**	**0**	**12**	**3**	**0**	**4**	120	124.30
Hourly Average	**0.00**	**0.50**	**24.75**	**0.00**	**3.00**	**0.75**	**0.00**	**1.00**	30.00	31.08

AM Peak Total	**0**	**3**	**149**	**0**	**23**	**6**	**0**	**4**	185	190.20
AM Peak Average	**0.00**	**0.38**	**18.63**	**0.00**	**2.88**	**0.75**	**0.00**	**0.50**	23.13	23.78

0815 - 0915 (Junction AM Peak Hour)

	Movement 1.12: Right from B4371 Sandford Avenue (West) to A49 Crossways								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0815 - 0830	0	0	16	0	2	0	0	0	18	18.00
0830 - 0845	0	0	16	0	1	1	0	1	19	20.50
0845 - 0900	0	1	37	0	4	0	0	3	45	47.40
0900 - 0915	0	0	27	0	6	1	0	0	34	34.50
Peak Hour Total	**0**	**1**	**96**	**0**	**13**	**2**	**0**	**4**	116	120.40
Peak Hour Average	**0.00**	**0.25**	**24.00**	**0.00**	**3.25**	**0.50**	**0.00**	**1.00**	29.00	30.10

1600 - 1800 (Weekday PM Peak)

	Movement 1.12: Right from B4371 Sandford Avenue (West) to A49 Crossways								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	27	0	2	0	0	0	29	29.00
1615 - 1630	1	0	24	0	1	0	0	0	26	25.20
1630 - 1645	0	0	30	0	3	0	0	0	33	33.00
1645 - 1700	0	0	35	0	5	0	0	0	40	40.00
Hourly Total	**1**	**0**	**116**	**0**	**11**	**0**	**0**	**0**	128	127.20
Hourly Average	**0.25**	**0.00**	**29.00**	**0.00**	**2.75**	**0.00**	**0.00**	**0.00**	32.00	31.80
1700 - 1715	0	0	31	0	1	1	0	0	33	33.50
1715 - 1730	0	0	34	0	2	0	0	0	36	36.00
1730 - 1745	0	0	20	0	4	1	0	0	25	25.50
1745 - 1800	0	0	26	0	3	0	0	0	29	29.00
Hourly Total	**0**	**0**	**111**	**0**	**10**	**2**	**0**	**0**	123	124.00
Hourly Average	**0.00**	**0.00**	**27.75**	**0.00**	**2.50**	**0.50**	**0.00**	**0.00**	30.75	31.00

PM Peak Total	**1**	**0**	**227**	**0**	**21**	**2**	**0**	**0**	251	251.20
PM Peak Average	**0.13**	**0.00**	**28.38**	**0.00**	**2.63**	**0.25**	**0.00**	**0.00**	31.38	31.40

1630 - 1730 (Junction PM Peak Hour)

	Movement 1.12: Right from B4371 Sandford Avenue (West) to A49 Crossways								Junction Peak Hour Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	30	0	3	0	0	0	33	33.00
1645 - 1700	0	0	35	0	5	0	0	0	40	40.00
1700 - 1715	0	0	31	0	1	1	0	0	33	33.50
1715 - 1730	0	0	34	0	2	0	0	0	36	36.00
Peak Hour Total	**0**	**0**	**130**	**0**	**11**	**1**	**0**	**0**	142	142.50
Peak Hour Average	**0.00**	**0.00**	**32.50**	**0.00**	**2.75**	**0.25**	**0.00**	**0.00**	35.50	35.63

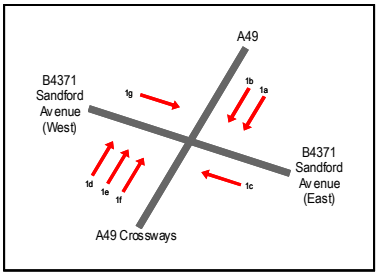
Church Stretton, Shropshire
Queue Length Survey

Site 1 of 1
A49
B4371 Sandford Avenue
A49 Crossways

Lat/Long
lat 52.537622° lon -2.801432°

Date
Friday 20 June 2014

Weather
Sunny Intervals
Temp: 18°C



0730 - 0930 (Weekday AM Peak)

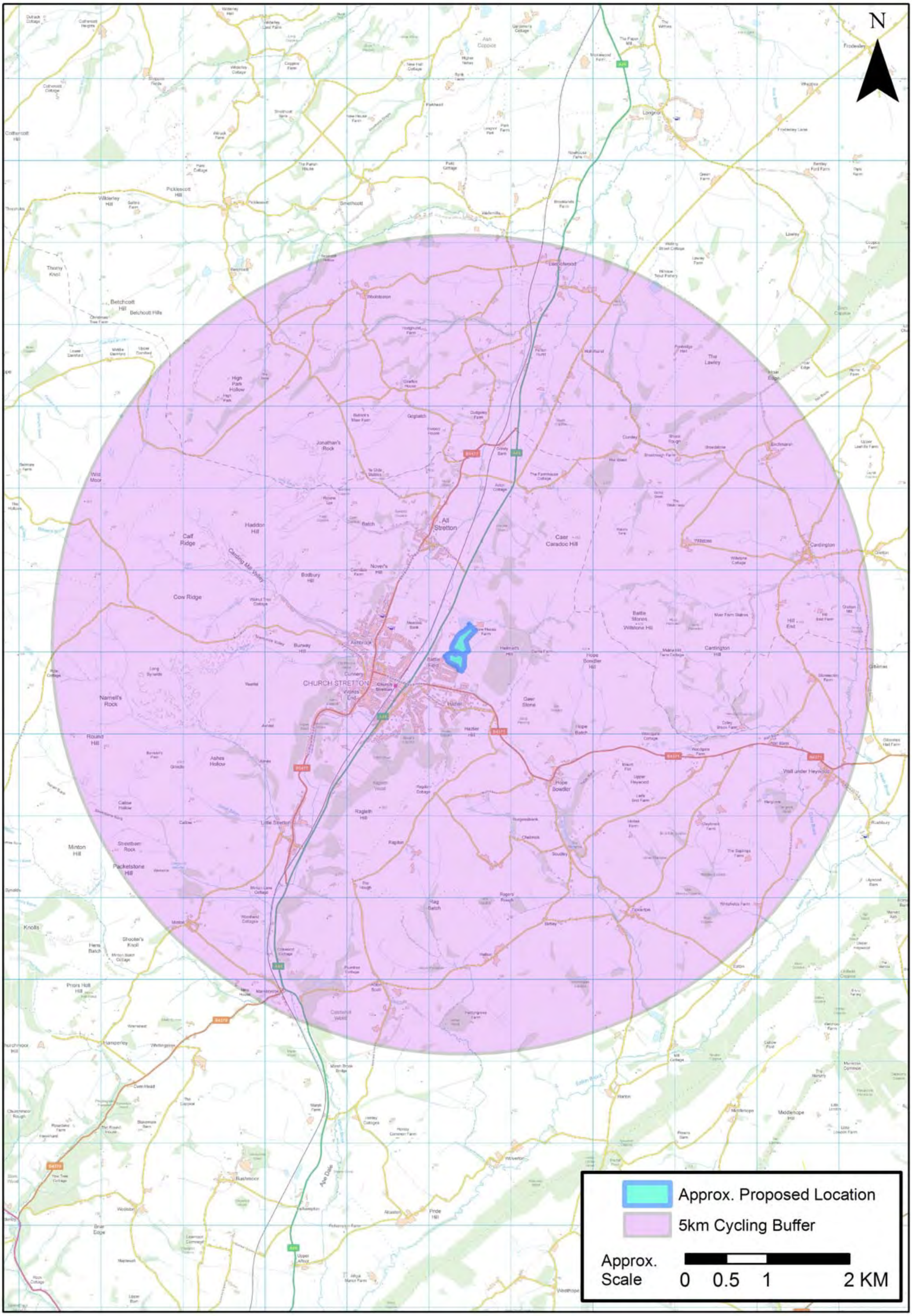
TIME	1a	1b	1c	1d	1e	1f	1g
0730 - 0735	2	2	4	1	2	0	1
0735 - 0740	3	3	3	1	4	1	2
0740 - 0745	6	3	4	2	4	1	3
0745 - 0750	5	2	5	2	3	0	4
0750 - 0755	8	1	4	4	6	0	5
0755 - 0800	5	4	4	1	3	1	4
0800 - 0805	5	3	8	2	9	1	9
0805 - 0810	12	1	8	3	10	1	6
0810 - 0815	8	2	5	2	15	1	4
0815 - 0820	10	3	7	3	4	1	6
0820 - 0825	17	3	9	3	4	3	8
0825 - 0830	7	2	5	3	10	1	7
Hourly Average	**7.33**	**2.42**	**5.50**	**2.25**	**6.17**	**0.92**	**4.92**
0830 - 0835	5	5	6	2	5	2	5
0835 - 0840	5	3	7	3	3	1	3
0840 - 0845	7	5	15	3	9	0	5
0845 - 0850	8	8	10	4	8	1	13
0850 - 0855	12	5	4	11	6	0	10
0855 - 0900	11	4	13	6	7	2	5
0900 - 0905	6	4	4	6	4	1	9
0905 - 0910	11	1	4	4	7	2	6
0910 - 0915	12	4	5	2	5	0	19
0915 - 0920	2	2	6	2	9	0	7
0920 - 0925	6	2	11	3	16	1	6
0925 - 0930	3	1	10	2	8	1	2
Hourly Average	**7.33**	**3.67**	**7.92**	**4.00**	**7.25**	**0.92**	**7.50**

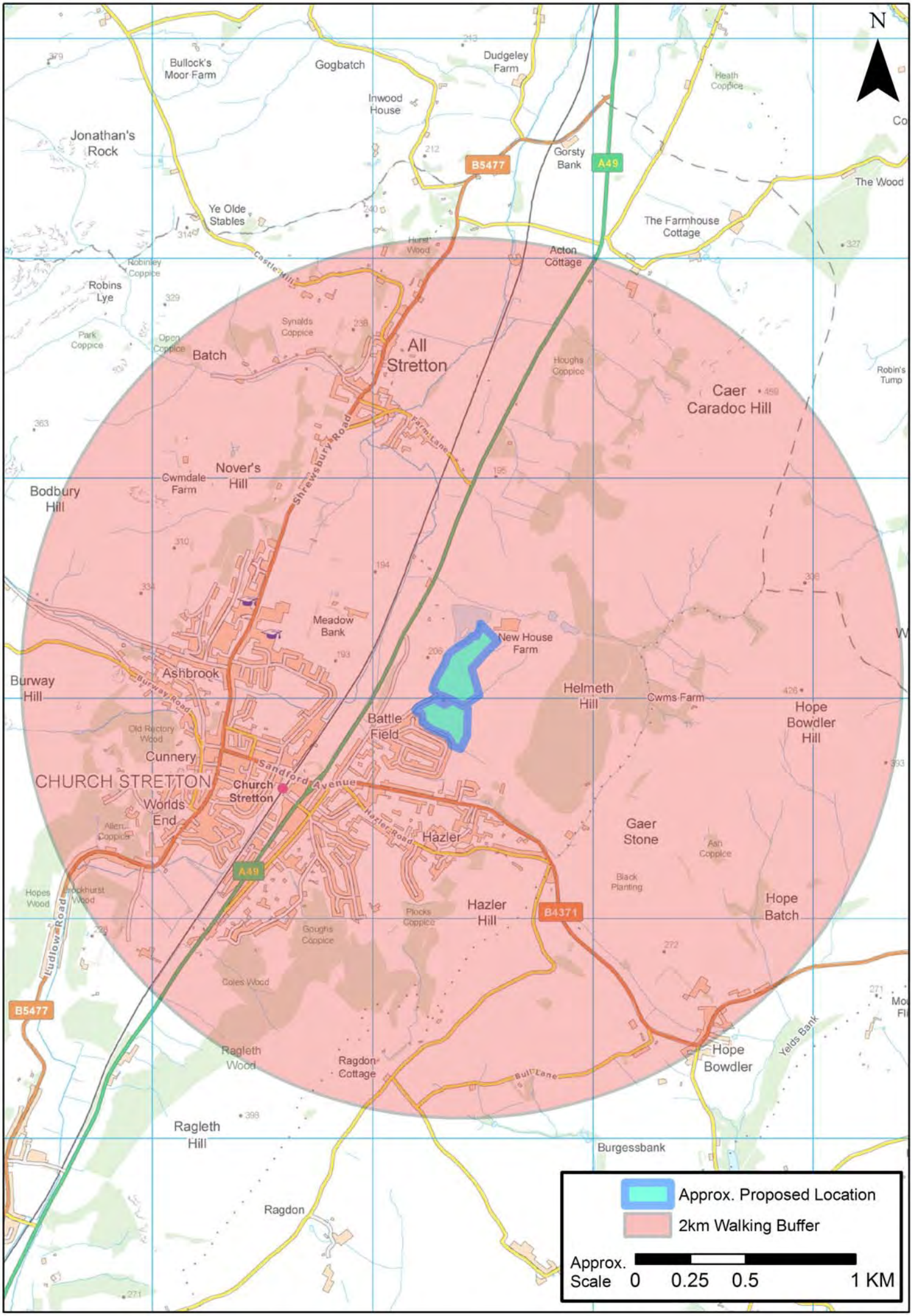
AM Peak Average	**7.33**	**3.04**	**6.71**	**3.13**	**6.71**	**0.92**	**6.21**

1600 - 1800 (Weekday PM Peak)

TIME	1a	1b	1c	1d	1e	1f	1g
1600 - 1605	9	2	4	6	5	0	7
1605 - 1610	11	5	7	3	2	1	18
1610 - 1615	9	5	6	1	16	2	9
1615 - 1620	10	1	4	3	14	1	9
1620 - 1625	15	3	8	1	10	2	8
1625 - 1630	8	3	11	1	12	1	7
1630 - 1635	6	2	3	3	6	4	14
1635 - 1640	9	2	4	2	14	2	10
1640 - 1645	13	4	5	2	12	1	11
1645 - 1650	11	4	5	4	10	2	7
1650 - 1655	6	1	4	3	10	1	15
1655 - 1700	9	3	5	3	5	1	7
Hourly Average	**9.67**	**2.92**	**5.50**	**2.67**	**9.67**	**1.50**	**10.17**
1700 - 1705	14	3	9	1	20	1	21
1705 - 1710	12	5	2	8	14	1	12
1710 - 1715	15	3	5	4	13	1	18
1715 - 1720	11	2	7	5	8	2	7
1720 - 1725	15	4	10	4	6	3	17
1725 - 1730	17	1	5	3	19	2	18
1730 - 1735	16	2	7	2	9	2	10
1735 - 1740	10	3	4	2	12	2	9
1740 - 1745	11	2	9	2	7	1	14
1745 - 1750	5	4	6	2	15	3	7
1750 - 1755	9	1	5	6	6	5	17
1755 - 1800	18	6	6	3	13	1	7
Hourly Average	**12.75**	**3.00**	**6.25**	**3.50**	**11.83**	**2.00**	**13.08**

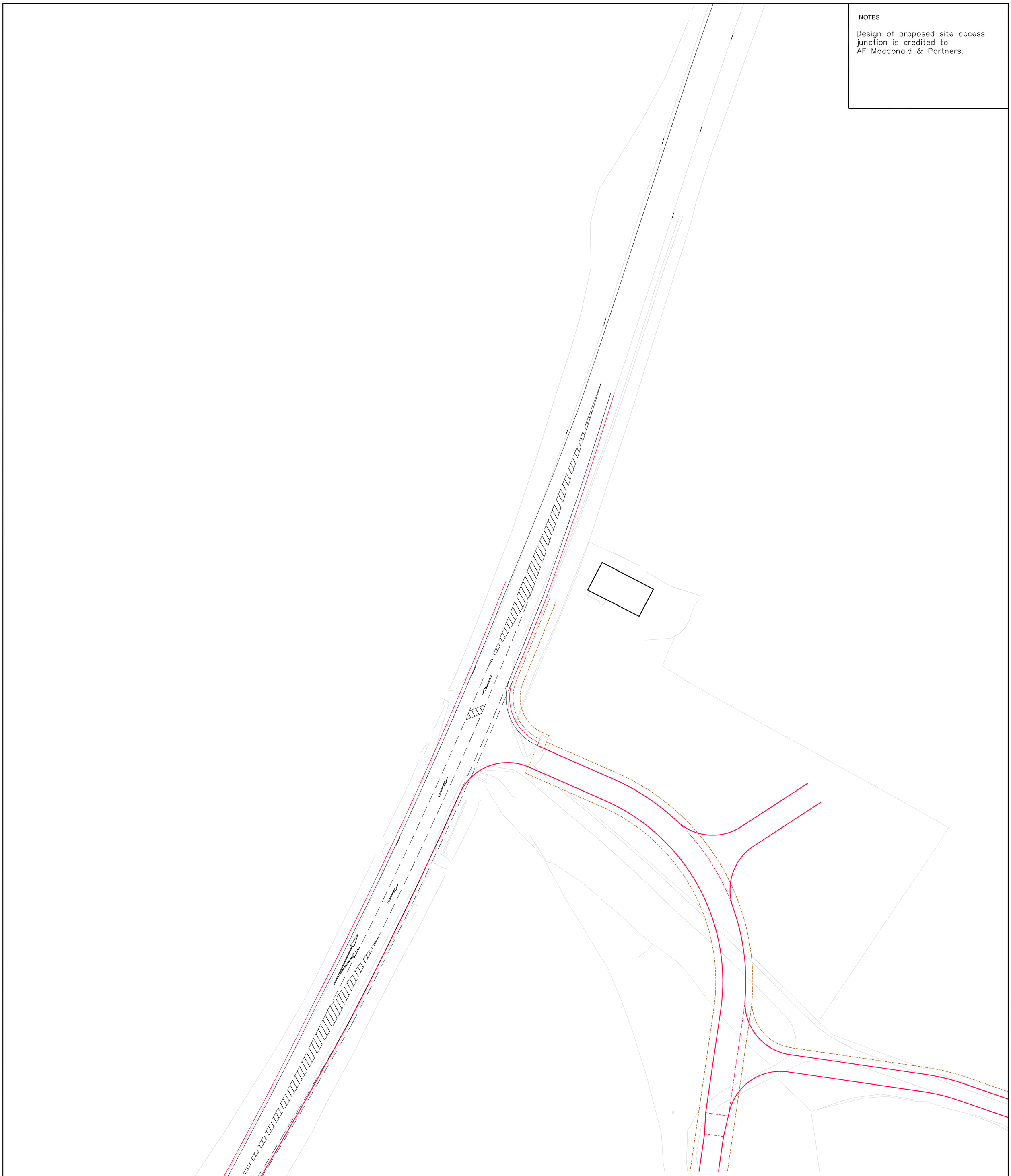
PM Peak Average	**11.21**	**2.96**	**5.88**	**3.08**	**10.75**	**1.75**	**11.63**


N
Approx. Proposed Location
5km Cycling Buffer
Approx.
Scale
0 0.5 1 2 KM
CHURCH STRETTON
All
Stretton
Caer
Caradoc Hill
Cardington
Wall under Heywood
Hope
Bowdler
Little Stretton
Longnor
Leebotwood
Cow Ridge
Calf
Ridge
Haddon
Hill
Jonathan's
Rock
Burway
Hill
Namell's
Rock
Round
Hill
Ashes
Hollow
Minton
Hill
Packetstone
Hill
Ragleth
Hill
Hazler
Hill
Cardington
Hill
Battle
Stones
Willstone Hill
Picklescott
Hill
Betchcott
Hill
Thorny
Knoll
Knolls
Shooter's
Knoll
Priors Holt
Hill
High
Park
Hollow
The
Lawley
Hill
End
Hope
Bowdler
Hill
Gaer
Stone
Rag
Batch
Cadwell
Wood
Ape Dale


N
Bullock's Moor Farm
Gogbatch
Dudgeley Farm
Inwood House
Jonathan's Rock
B5477
Gorsty Bank
A49
Heath Coppice
The Wood
Ye Olde Stables
The Farmhouse Cottage
Acton Cottage
Robinley Coppice
Robins Lye
Castle Hill
Synalds Coppice
Park Coppice
Open Coppice
Batch
All Stretton
Houghs Coppice
Caer Caradoc Hill
Robin's Tump
Shrewsbury Road
Farm Lane
Cwmdale Farm
Nover's Hill
Bodbury Hill
Meadow Bank
New House Farm
Ashbrook
Burway Hill
Burway Road
Helmeth Hill
Cwms Farm
Hope Bowdler Hill
Battle Field
Old Rectory Wood
Cunnery
CHURCH STRETTON
Church Stretton
Sandford Avenue
Worlds End
Allen Coppice
Hazler Road
Hazler
Gaer Stone
Ash Coppice
Black Planting
Hopes Wood
Brockhurst Wood
Ludlow Road
Hazler Hill
Plocks Coppice
Goughs Coppice
Hope Batch
Coles Wood
Ragleth Wood
Ragdon Cottage
Bull Lane
Yelds Bank
Hope Bowdler
Ragleth Hill
Burgessbank
Ragdon
Approx. Proposed Location
2km Walking Buffer
Approx. Scale 0 0.25 0.5 1 KM

NOTES

Design of proposed site access junction is credited to AF Macdonald & Partners.



Version	Amendment	Drawn Date	Checked Date	Approved Date
A	First Issue	JR 11.07.14	JH 11.07.14	JH 11.07.14

Client
Morris Property

Project
Proposed Residential Development, New House Farm, Church Stretton

Drawing Title
Proposed Site Access Junction – Ghost Island Arrangement

mouchel

Scales (at A1 size)
1:500

Purpose of Issue
For Information

Office	Tel No	Drawing No	Version
Manchester	0161 832 4542	SK01 110714	A

At original drawing size (A1) this line measures 100mm

Design Features of Proposed Site Access Junction

Feature	DMRB Reference (TD 42/95 unless stated)	Requirement	Proposed Design
Type of Junction	Fig 2-2 / p2.15 / p2.20	Ghost islands can be used to upgrade existing junctions where the minor road 2-way flow is expected to be between 300 to 5000 vehicles AADT.	The proposed development flows are likely to fall within these figures and so a ghost island is proposed.
Horizontal Visibility - Major road	p7.5 (and DMRB TD 9/93 Chapter 2)	Drivers approaching a junction along the major road approaches shall be able to see the minor road entry from 215m SSD (distance required for 100kph design speed).	At least 215m visibility available.
Vertical Visibility	p7.4 (and DMRB TD 9/93 Chapter 2)	SSD envelope of clear visibility required from driver's eye height of 1.05m to 2.0m to object height of 0.26m to 2.0m.	Clear visibility is provided.
Visibility - Minor road	p7.6a	Approaching drivers shall have unobstructed visibility of the junction from a distance corresponding to the Desirable Minimum Stopping Sight Distance (SSD) for the design speed of the minor road. For 50kph design speed: 70m back from give way line.	Required visibility is available, assuming foliage is not overgrown.
	p7.6b	An approaching driver shall be able to see clearly the junction form, and peripheral elements of the junction layout from 15m back from give way line.	Required visibility is available, assuming foliage is not overgrown.
	p7.6c	Visibility splay with X distance of 9m (or relaxed to 4.5m) and Y distance of 215m required for 100kph design speed.	Visibility splay using X distance of 4.5m and Y distance of 215m appears to be acheivable.
Minor road corner radii	p7.17c	15m at ghost island junctions, with tapers of 1:6 over a distance of 30m.	15m radii provided. Provision of taper is not a mandatory requirement.
Through lane width	p7.20	At ghost island junctions, the through lane in each direction shall not be greater than 3.65m wide, exclusive of hardstrips, but shall not be less than 3.0m wide.	3.5m width provided.
Right turn lane width	p7.35	For new junctions, the desirable width of a ghost island turning lane shall be 3.5m.	3.5m width provided.
Ghost island taper	Table 7-3	1:30 taper for 100kph design speed, developed around centreline. 1.75x30 = 52.5m taper required.	63m taper provided.
Turning length	p7.32	The turning length shall be 10m long irrespective of the type of junction, design speed or gradient, measured from the centreline of the minor road.	10m turning length provided.
Direct taper length	p7.34 / Table 7-4	25m length required for 100kph design speed.	25m direct taper length provided.
Deceleration length	p7.40 / Table7-5a	80m length required for 100kph design speed where major road gradient is 0-4%.	80m deceleration length provided.
Use of hard strips	DMRB TD 9/93 Chapter 6 Table 4	For Wide Single (10m) Carriageway WS2, edge treatment should be 1m hard strips.	Replicate the existing edge treatment.
Use of nearside diverging taper	p7.52	Required where volume of left turning traffic (from major to minor road) is greater than 600 vehicles AADT.	Not required as volume requirement not reached.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
03	SOUTH WEST		
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	SF	SUFFOLK	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	LC	LANCASHIRE	1 days
09	NORTH		
	CB	CUMBRIA	2 days
11	SCOTLAND		
	EA	EAST AYRSHIRE	1 days
	HI	HIGHLAND	1 days

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

Filtering Stage 2 selection:

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

Parameter: Number of dwellings
Actual Range: 37 to 101 (units:)
Range Selected by User: 35 to 135 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 30/05/13

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

Selected survey days:

Monday	5 days
Tuesday	2 days
Thursday	2 days
Friday	2 days

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

Selected survey types:

Manual count	11 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	11

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

Selected Location Sub Categories:

Residential Zone	7
Out of Town	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3	11 days

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

Population within 1 mile:

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

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	3 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	2 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	6 days

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

Travel Plan:

Yes	1 days
No	10 days

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

LIST OF SITES relevant to selection parameters

1 CB-03-A-03 SEMI DETACHED CUMBRIA
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY 20/11/08 Survey Type: MANUAL

2 CB-03-A-04 SEMI DETACHED CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

3 EA-03-A-01 DETATCHED EAST AYRSHIRE
TALISKER AVENUE

KILMARNOCK
Edge of Town
Residential Zone
Total Number of dwellings: 39
Survey date: THURSDAY 05/06/08 Survey Type: MANUAL

4 ES-03-A-02 PRIVATE HOUSING EAST SUSSEX
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY 18/11/11 Survey Type: MANUAL

5 HI-03-A-11 BUNGALOWS HIGHLAND
STEVENSON ROAD
INSHES
INVERNESS
Edge of Town
Residential Zone
Total Number of dwellings: 85
Survey date: MONDAY 05/06/06 Survey Type: MANUAL

6 LC-03-A-22 BUNGALOWS LANCASHIRE
CLIFTON DRIVE NORTH

BLACKPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 98
Survey date: TUESDAY 18/10/05 Survey Type: MANUAL

7 NY-03-A-05 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD

RIPON
Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: MONDAY 22/09/08 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 SF-03-A-03 MIXED HOUSES SUFFOLK
BARTON HILL
FORNHAM ST MARTIN
BURY ST EDMUNDS
Edge of Town
Out of Town
Total Number of dwellings: 101
Survey date: MONDAY 15/05/06 Survey Type: MANUAL

9 WL-03-A-01 SEMI D./TERRACED W. BASSETT WILTSHIRE
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99
Survey date: MONDAY 02/10/06 Survey Type: MANUAL

10 WM-03-A-03 MIXED HOUSING WEST MIDLANDS
BASELEY WAY
ROWLEYS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 84
Survey date: MONDAY 24/09/07 Survey Type: MANUAL

11 WO-03-A-02 SEMI DETACHED WORCESTERSHIRE
MEADOWHILL ROAD

REDDITCH
Edge of Town
No Sub Category
Total Number of dwellings: 48
Survey date: TUESDAY 02/05/06 Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	71	0.066	11	71	0.277	11	71	0.343
08:00 - 09:00	11	71	0.156	11	71	0.406	11	71	0.562
09:00 - 10:00	11	71	0.209	11	71	0.241	11	71	0.450
10:00 - 11:00	11	71	0.154	11	71	0.171	11	71	0.325
11:00 - 12:00	11	71	0.186	11	71	0.181	11	71	0.367
12:00 - 13:00	11	71	0.219	11	71	0.167	11	71	0.386
13:00 - 14:00	11	71	0.194	11	71	0.191	11	71	0.385
14:00 - 15:00	11	71	0.204	11	71	0.210	11	71	0.414
15:00 - 16:00	11	71	0.274	11	71	0.214	11	71	0.488
16:00 - 17:00	11	71	0.356	11	71	0.189	11	71	0.545
17:00 - 18:00	11	71	0.421	11	71	0.196	11	71	0.617
18:00 - 19:00	11	71	0.264	11	71	0.203	11	71	0.467
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.703			2.646			5.349

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

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

Parameter summary

Trip rate parameter range selected:	37 - 101 (units:)
Survey date date range:	01/01/05 - 30/05/13
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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

Diagram 1
2014 Base Traffic Flows: AM Peak Hour 08:00 - 09:00 (PCUs)

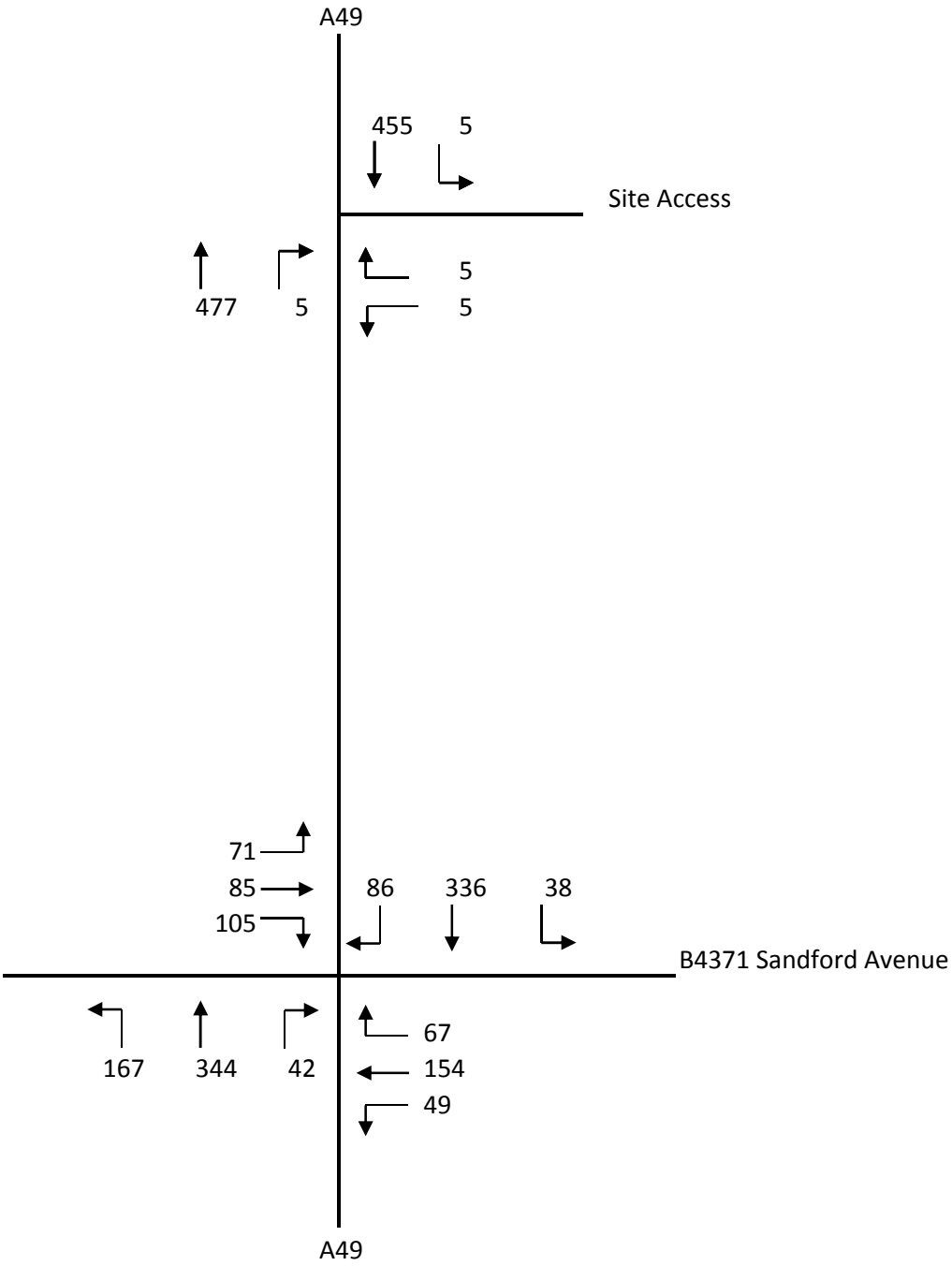


Diagram 2
2014 Base Traffic Flows: PM Peak Hour 16:30 - 17:30 (PCUs)

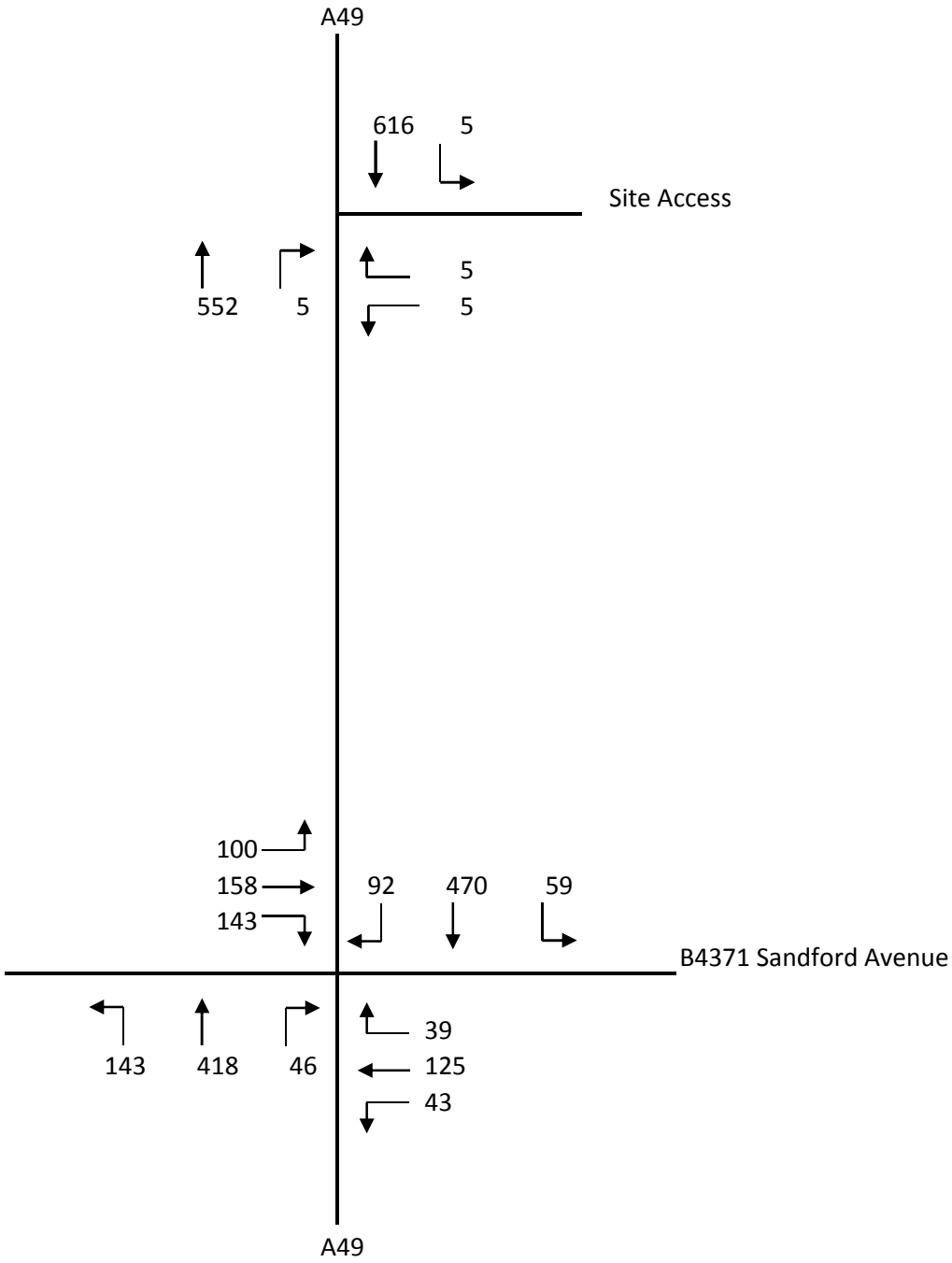


Diagram 3
Directional Distribution: AM Peak Hour

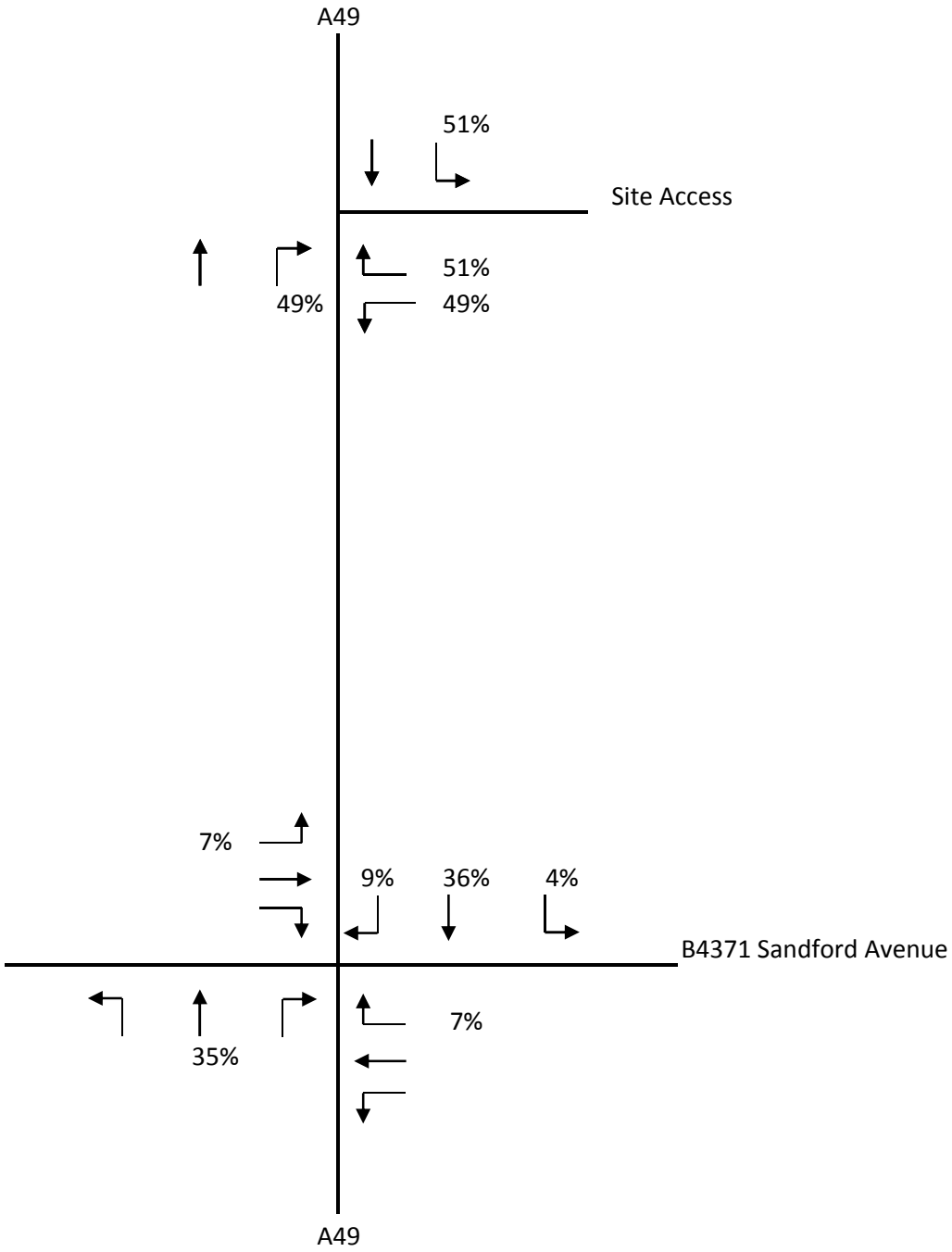


Diagram 4
Directional Distribution: PM Peak Hour

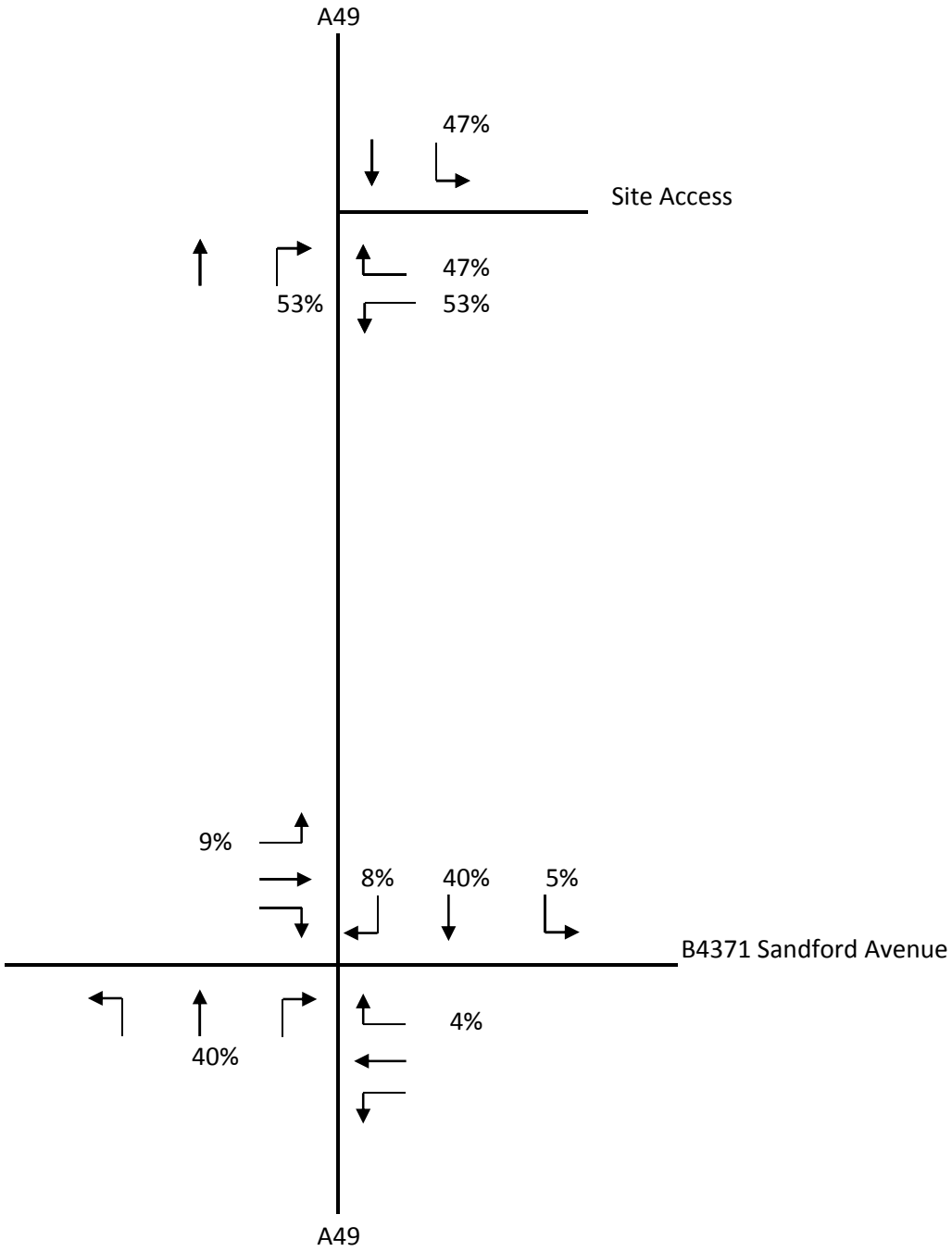


Diagram 5
Development Generated Trips: AM Peak Hour

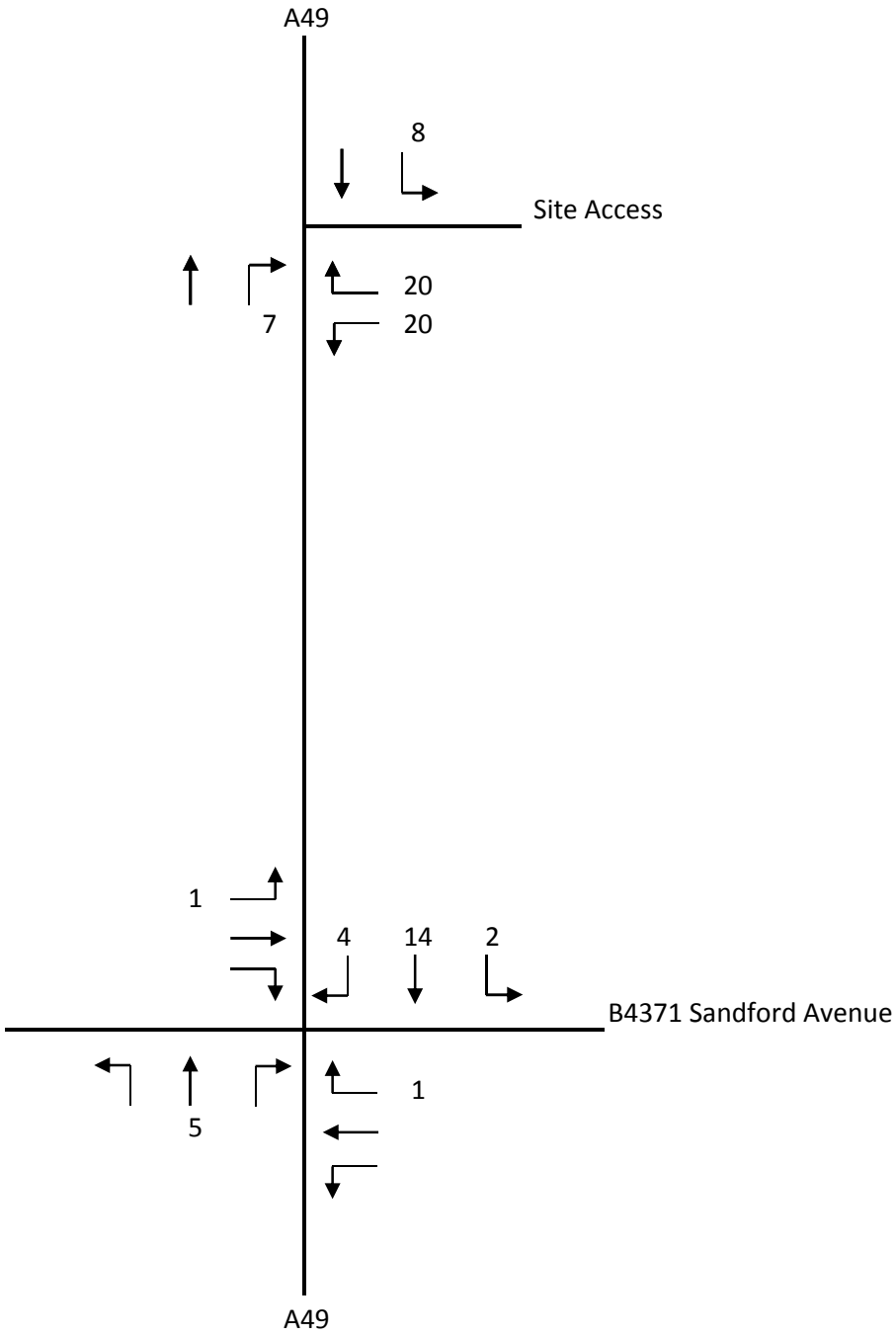


Diagram 6
Development Generated Trips: PM Peak Hour

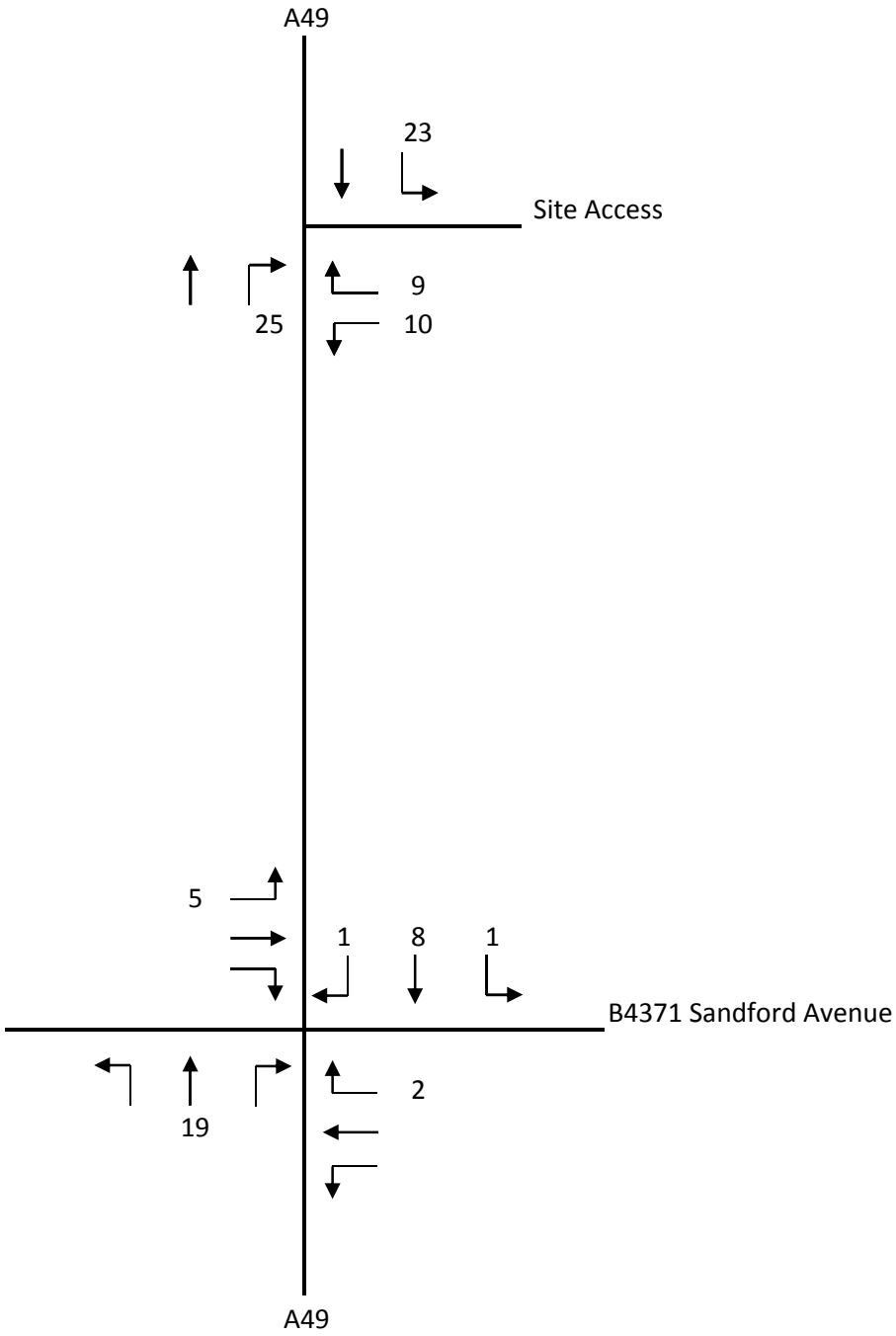


Diagram 7
Committed Development Trips: AM Peak Hour

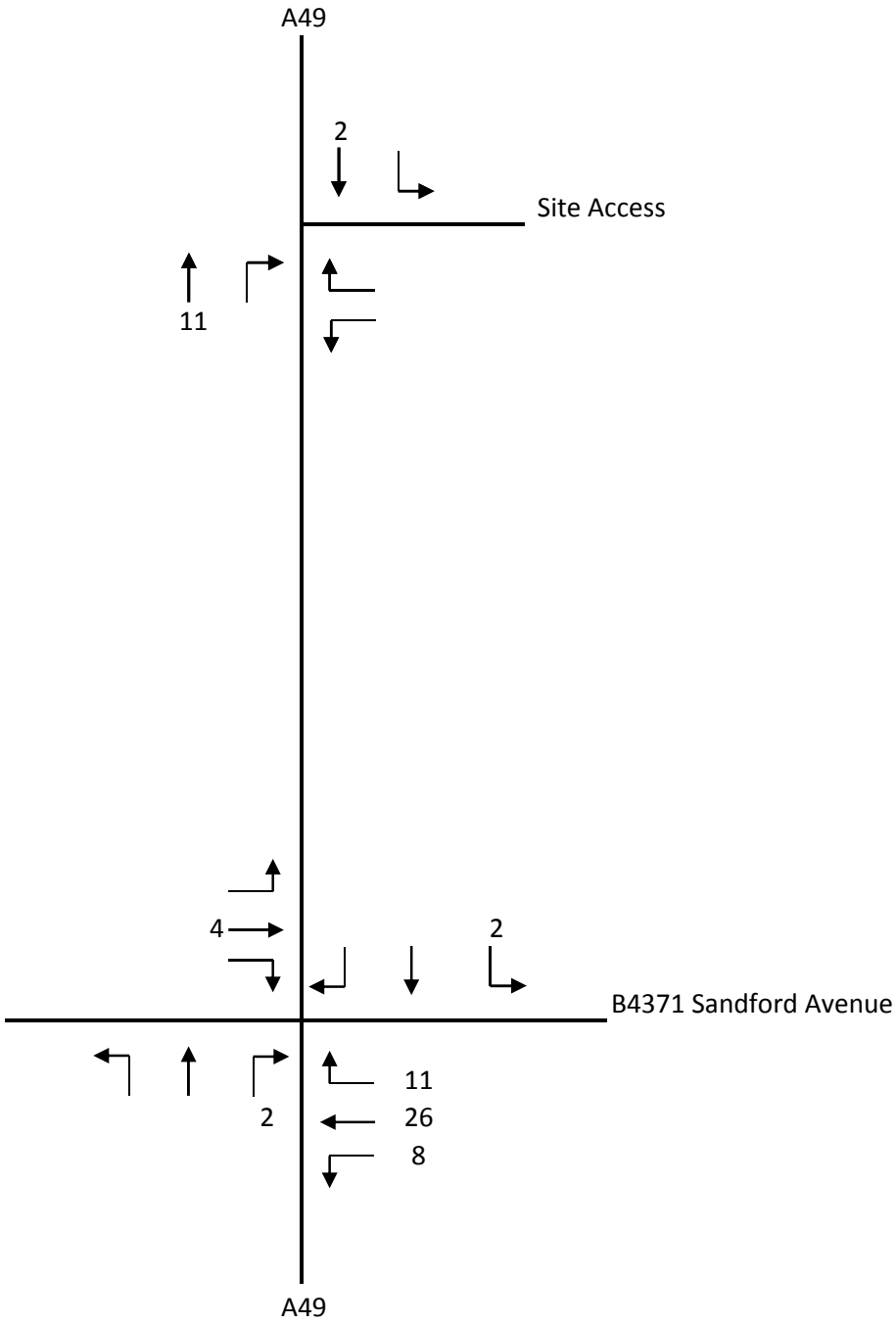


Diagram 8
Committed Development Trips: PM Peak Hour

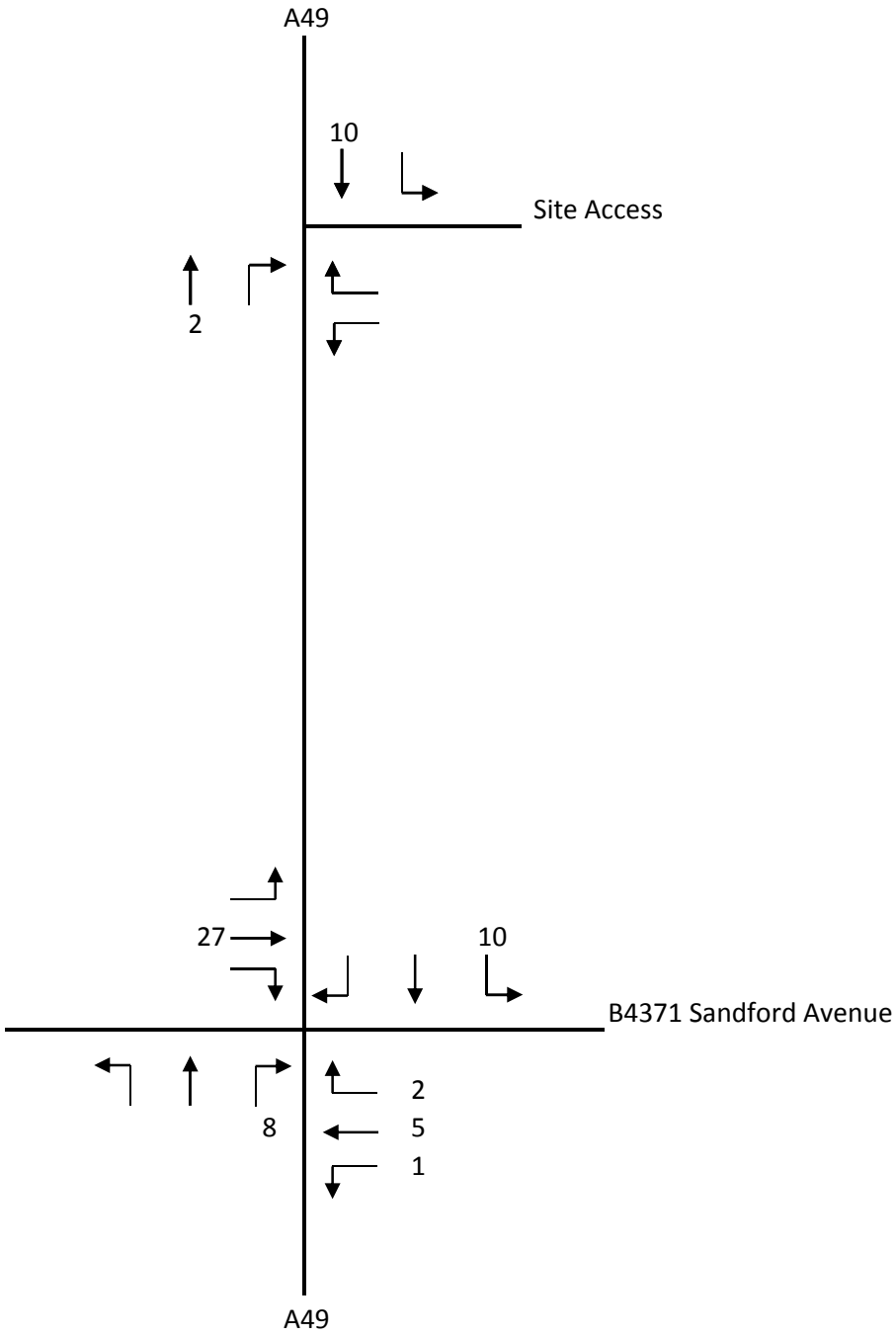


Diagram 9
2016 Base Traffic Flows: AM Peak Hour

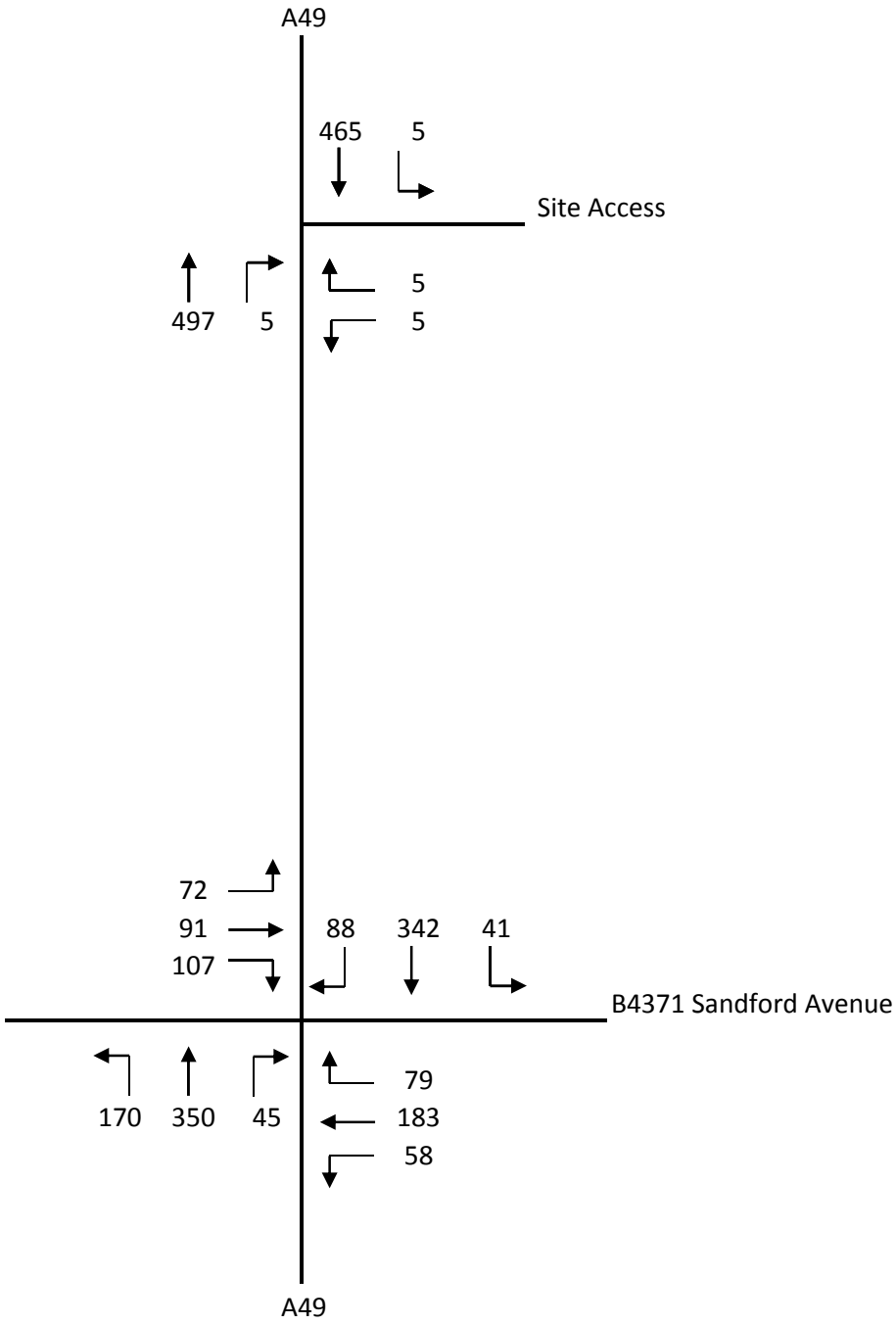


Diagram 10
2016 Base Traffic Flows: PM Peak Hour

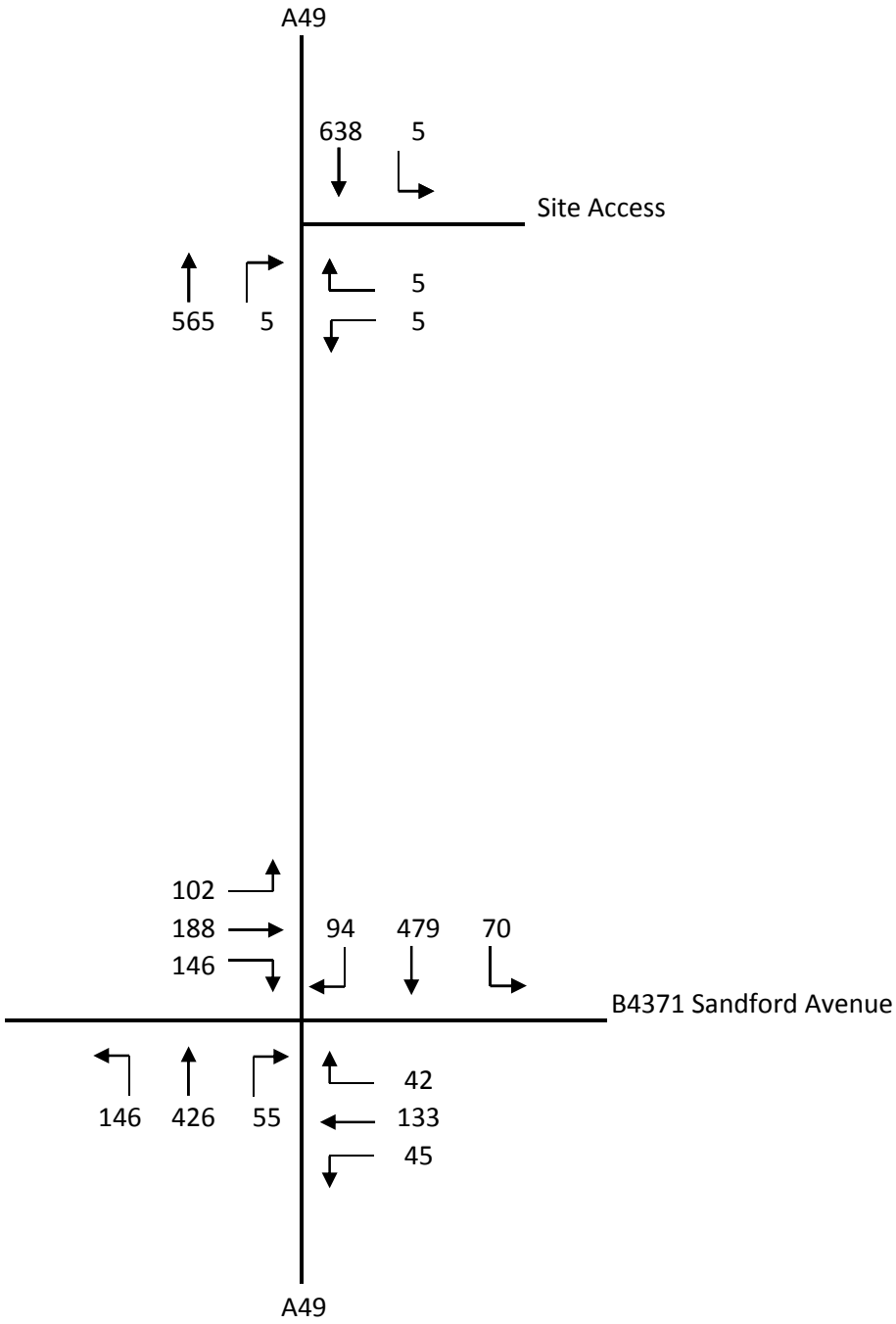


Diagram 11
2026 Base Traffic Flows: AM Peak Hour

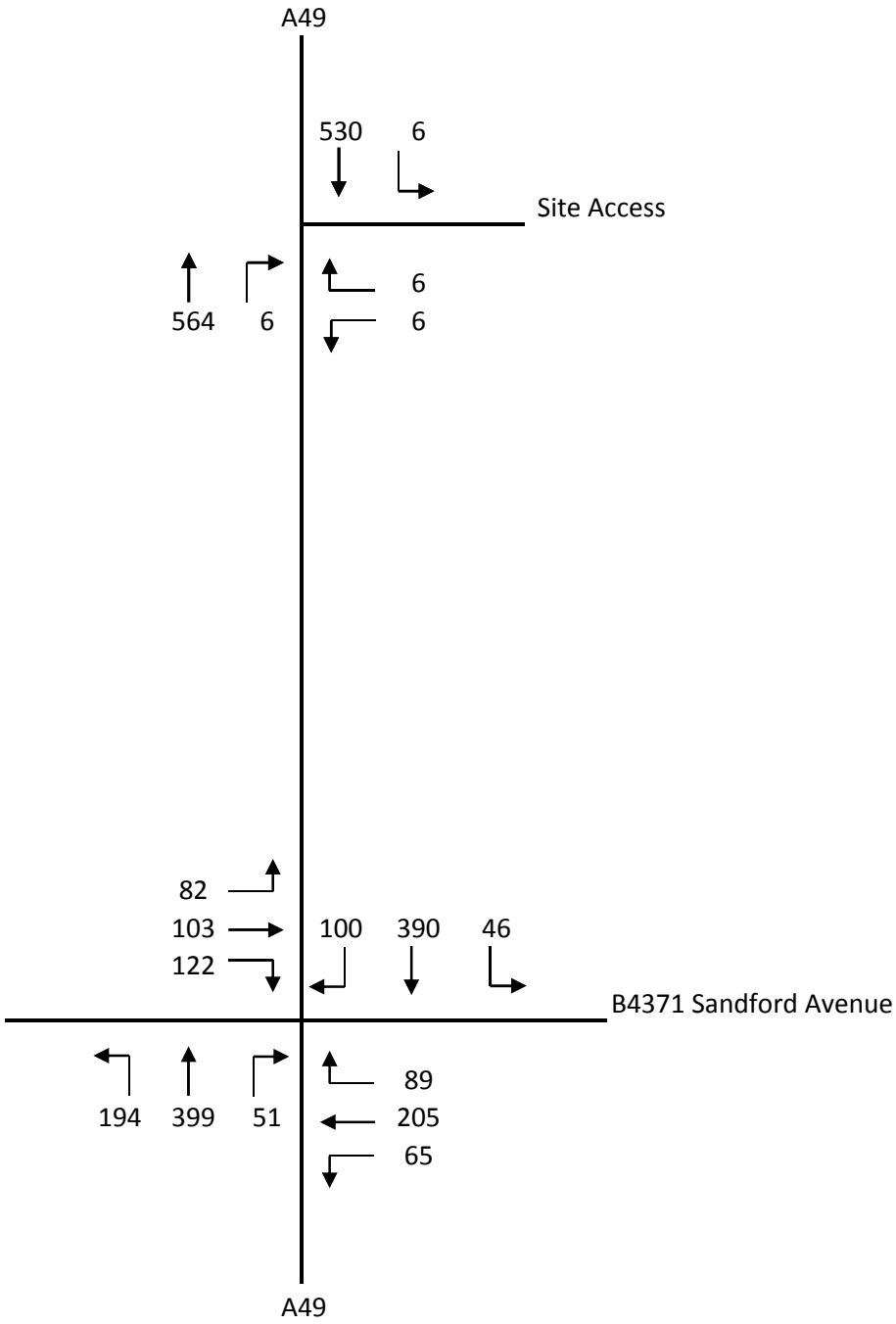


Diagram 12
2026 Base Traffic Flows: PM Peak Hour

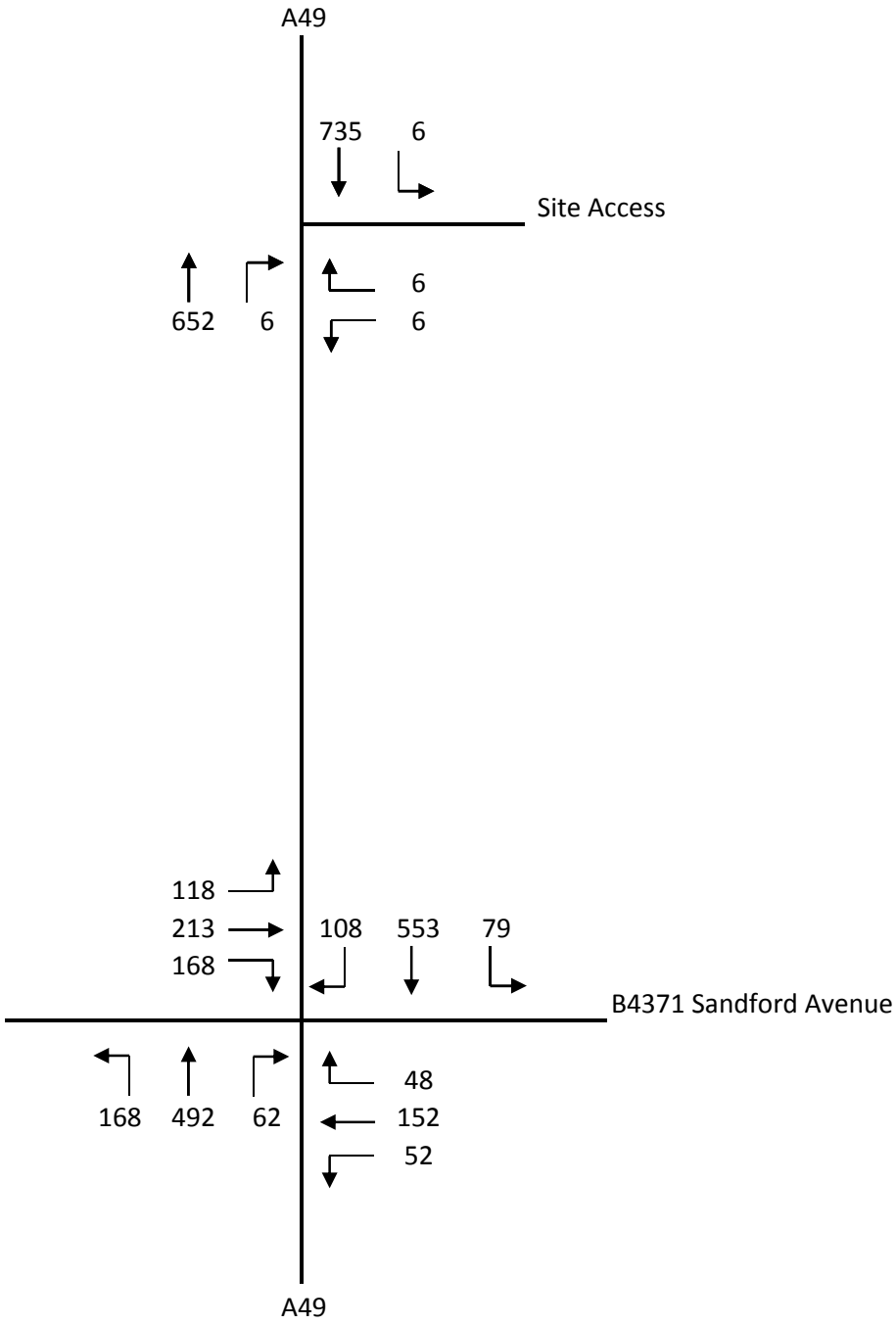


Diagram 13
2016 Base + Development Traffic Flows: AM Peak Hour

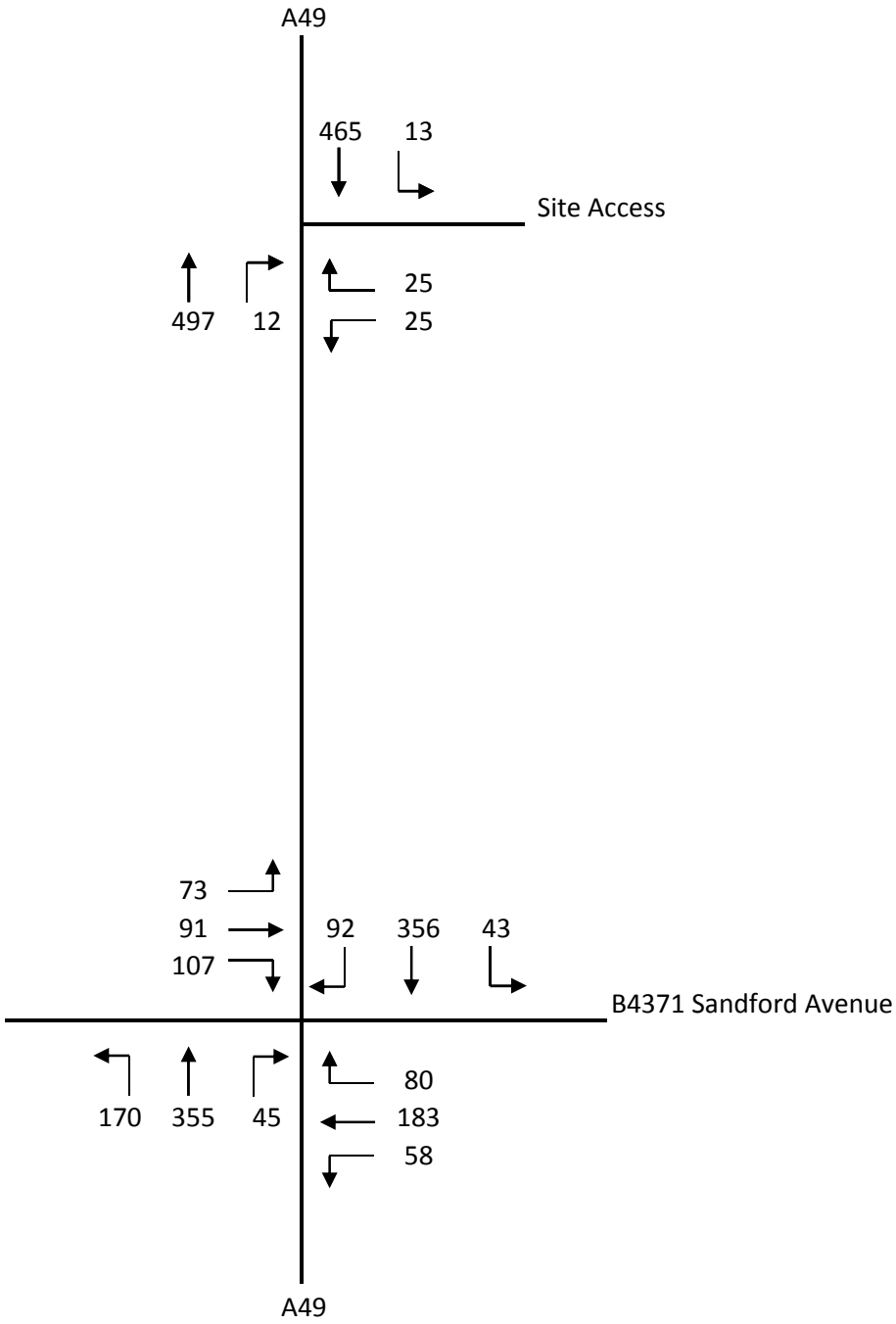


Diagram 14
2016 Base + Development Traffic Flows: PM Peak Hour

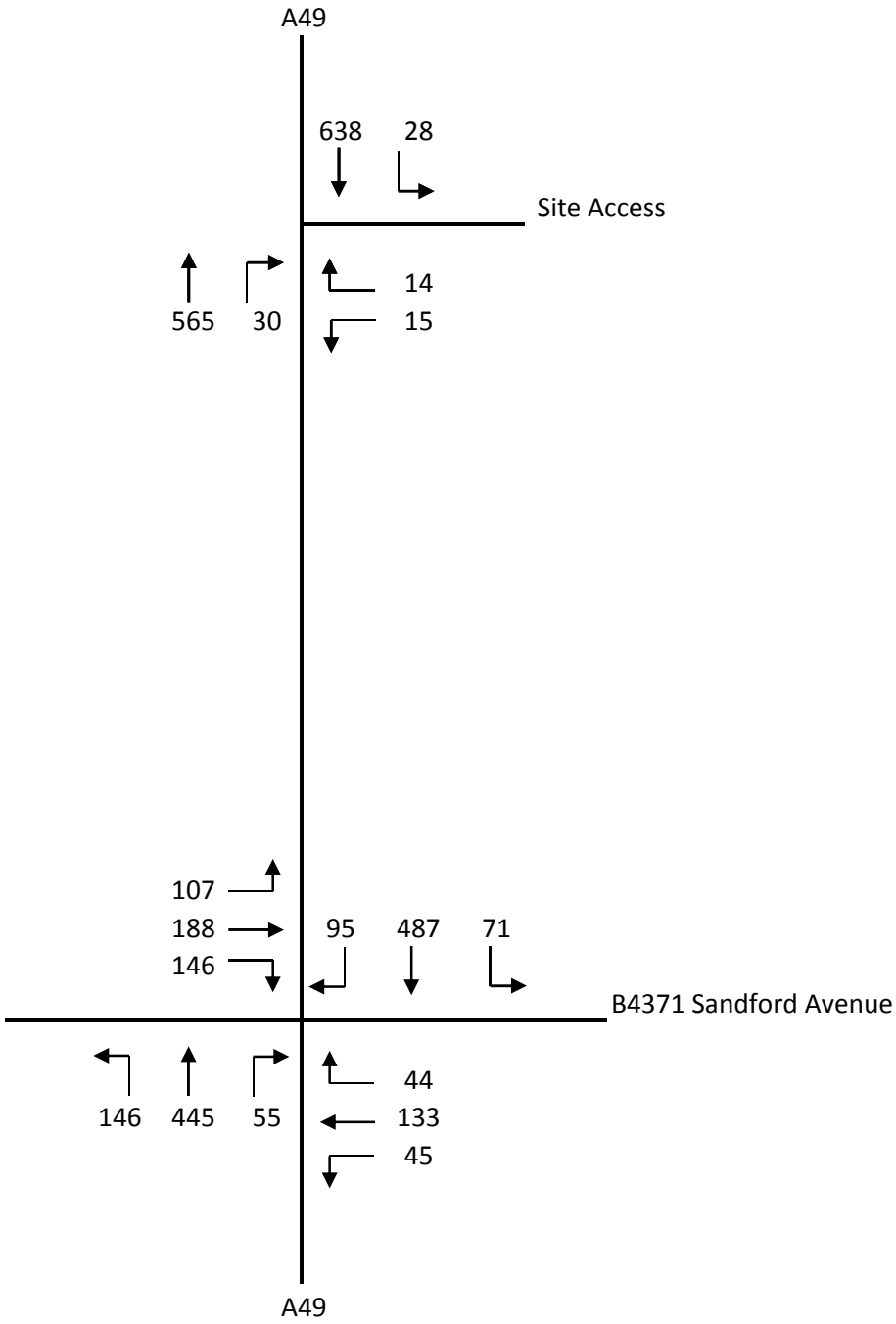


Diagram 15
2026 Base + Development Traffic Flows: AM Peak Hour

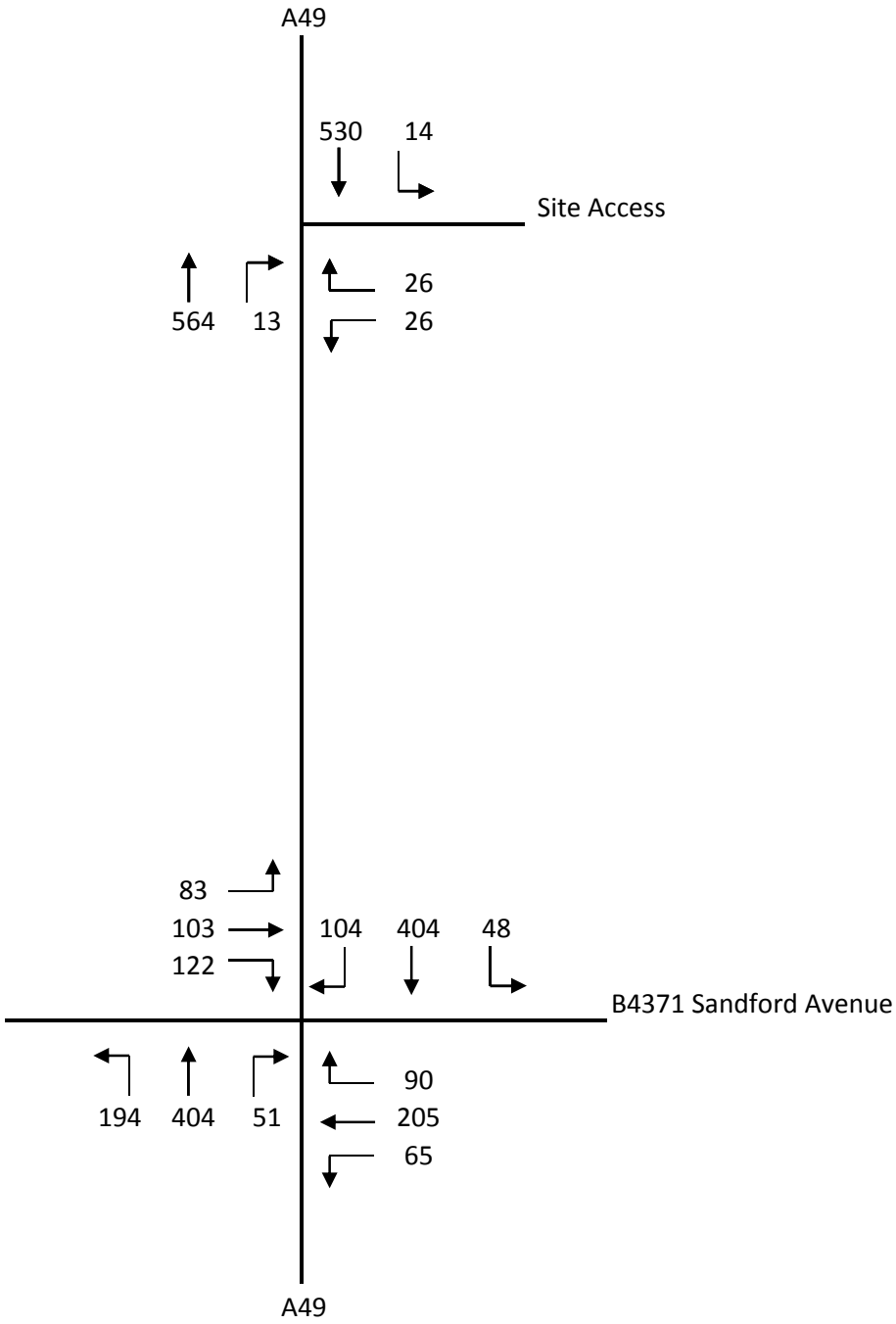
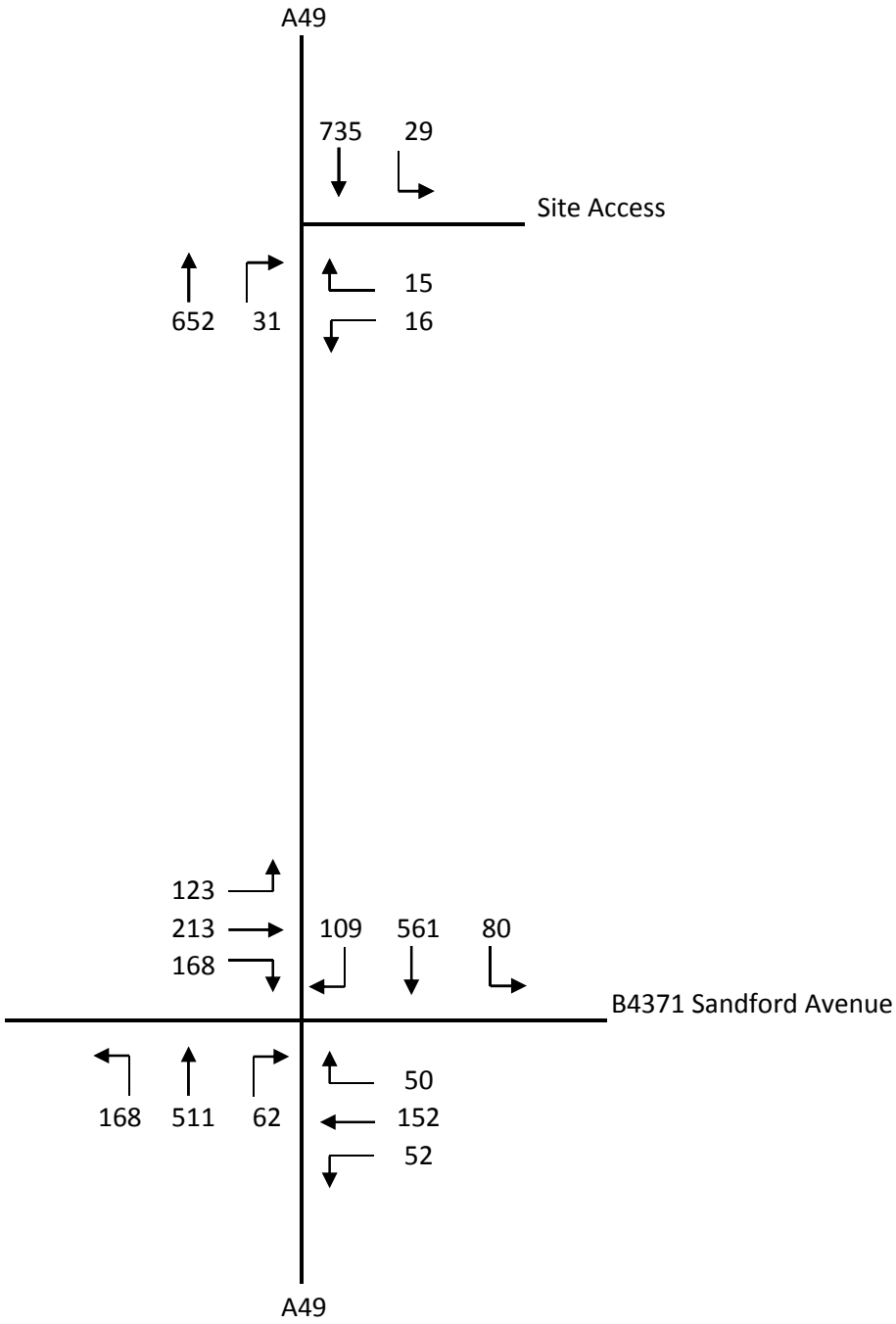


Diagram 16
2026 Base + Development Traffic Flows: PM Peak Hour



TRL LIMITED

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 4.0 (SEPT 2008)

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE BUREAU
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: Software@trl.co.uk

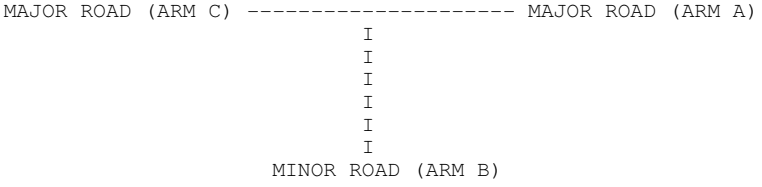
Run with file:-
"W:\Jobs\1063308 Church Stretton\05 Info & Calcs\03 Calculations\Calcs 06 - Junction Modelling\
Existing Site Access.vpi"
(drive-on-the-left) at 15:25:25 on Friday, 11 July 2014

RUN INFORMATION

RUN TITLE	: Existing Site Access
LOCATION	: New House Farm, Church Stretton
DATE	: 10/07/14
CLIENT	:
ENUMERATOR	: bhope [M7009997]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A49 North
ARM B IS Site Access
ARM C IS A49 South

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC	YES
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 23.0 M.
- VISIBILITY TO RIGHT	(VB-A) 47.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	8.00 M.
WIDTH AT 10 M FROM JUNCTION	5.20 M.
WIDTH AT 15 M FROM JUNCTION	2.70 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	DERIVED: 2 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2014 Base AM Peak Hour

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.75	8.63	5.75
ARM B	15.00	45.00	75.00	0.13	0.19	0.13
ARM C	15.00	45.00	75.00	6.03	9.04	6.03

Demand set: 2014 Base AM Peak Hour

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 08.00	ARM A	0.000	0.011	0.989
		0.0	5.0	455.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		5.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.990	0.010	0.000
		477.0	5.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Base AM Peak Hour
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.06	10.33	0.006		0.00	0.01	0.1		0.10
B-A	0.06	6.90	0.009		0.00	0.01	0.1		0.15
C-AB	0.06	10.46	0.006		0.00	0.01	0.1		0.10
A-B	0.06								
A-C	5.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.07	10.03	0.007		0.01	0.01	0.1		0.10
B-A	0.07	6.46	0.012		0.01	0.01	0.2		0.16
C-AB	0.07	10.17	0.007		0.01	0.01	0.1		0.10
A-B	0.07								
A-C	6.82								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.09	9.62	0.010		0.01	0.01	0.1		0.10
B-A	0.09	5.84	0.016		0.01	0.02	0.2		0.17
C-AB	0.09	9.76	0.009		0.01	0.01	0.1		0.10
A-B	0.09								
A-C	8.35								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.09	9.62	0.010		0.01	0.01	0.1		0.10
B-A	0.09	5.84	0.016		0.02	0.02	0.2		0.17
C-AB	0.09	9.76	0.009		0.01	0.01	0.1		0.10
A-B	0.09								
A-C	8.35								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.07	10.03	0.007		0.01	0.01	0.1		0.10
B-A	0.07	6.46	0.012		0.02	0.01	0.2		0.16
C-AB	0.07	10.17	0.007		0.01	0.01	0.1		0.10
A-B	0.07								
A-C	6.82								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.06	10.32	0.006		0.01	0.01	0.1		0.10
B-A	0.06	6.90	0.009		0.01	0.01	0.1		0.15
C-AB	0.06	10.46	0.006		0.01	0.01	0.1		0.10
A-B	0.06								
A-C	5.71								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	6.9	4.6	0.7	0.10	0.7	0.10
B-A	6.9	4.6	1.1	0.16	1.1	0.16
C-AB	6.9	4.6	0.7	0.10	0.7	0.10
A-B	6.9	4.6				
A-C	626.3	417.5				
ALL	1310.4	873.6	2.5	0.00	2.5	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2014 Base PM Peak Hour

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.76	11.64	7.76
ARM B	15.00	45.00	75.00	0.13	0.19	0.13
ARM C	15.00	45.00	75.00	6.96	10.44	6.96

Demand set: 2014 Base PM Peak Hour

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 17.00				
	ARM A	0.000	0.008	0.992
		0.0	5.0	616.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		5.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.991	0.009	0.000
		552.0	5.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Base PM Peak Hour
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.06	9.80	0.006		0.00	0.01	0.1		0.10
B-A	0.06	6.28	0.010		0.00	0.01	0.1		0.16
C-AB	0.06	9.93	0.006		0.00	0.01	0.1		0.10
A-B	0.06								
A-C	7.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.07	9.40	0.008		0.01	0.01	0.1		0.11
B-A	0.07	5.71	0.013		0.01	0.01	0.2		0.18
C-AB	0.07	9.53	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	9.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.09	8.85	0.010		0.01	0.01	0.2		0.11
B-A	0.09	4.92	0.019		0.01	0.02	0.3		0.21
C-AB	0.09	8.99	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	11.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.09	8.85	0.010		0.01	0.01	0.2		0.11
B-A	0.09	4.92	0.019		0.02	0.02	0.3		0.21
C-AB	0.09	8.99	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	11.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.07	9.40	0.008		0.01	0.01	0.1		0.11
B-A	0.07	5.71	0.013		0.02	0.01	0.2		0.18
C-AB	0.07	9.53	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	9.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.06	9.80	0.006		0.01	0.01	0.1		0.10
B-A	0.06	6.28	0.010		0.01	0.01	0.2		0.16
C-AB	0.06	9.93	0.006		0.01	0.01	0.1		0.10
A-B	0.06								
A-C	7.73								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	6.9	4.6	0.7	0.11	0.7	0.11
B-A	6.9	4.6	1.3	0.18	1.3	0.18
C-AB	6.9	4.6	0.7	0.11	0.7	0.11
A-B	6.9	4.6				
A-C	847.9	565.3				
ALL	1635.2	1090.1	2.7	0.00	2.7	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Base AM Peak Hour

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.88	8.81	5.88
ARM B	15.00	45.00	75.00	0.13	0.19	0.13
ARM C	15.00	45.00	75.00	6.28	9.41	6.28

Demand set: 2016 Base AM Peak Hour

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 08.00	ARM A	0.000	0.011	0.989
		0.0	5.0	465.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		5.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.990	0.010	0.000
		497.0	5.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Base AM Peak Hour
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.06	10.29	0.006		0.00	0.01	0.1		0.10
B-A	0.06	6.84	0.009		0.00	0.01	0.1		0.15
C-AB	0.06	10.43	0.006		0.00	0.01	0.1		0.10
A-B	0.06								
A-C	5.83								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.07	9.99	0.007		0.01	0.01	0.1		0.10
B-A	0.07	6.38	0.012		0.01	0.01	0.2		0.16
C-AB	0.07	10.13	0.007		0.01	0.01	0.1		0.10
A-B	0.07								
A-C	6.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.09	9.57	0.010		0.01	0.01	0.1		0.11
B-A	0.09	5.74	0.016		0.01	0.02	0.2		0.18
C-AB	0.09	9.71	0.009		0.01	0.01	0.1		0.10
A-B	0.09								
A-C	8.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.09	9.57	0.010		0.01	0.01	0.1		0.11
B-A	0.09	5.74	0.016		0.02	0.02	0.2		0.18
C-AB	0.09	9.71	0.009		0.01	0.01	0.1		0.10
A-B	0.09								
A-C	8.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.07	9.99	0.007		0.01	0.01	0.1		0.10
B-A	0.07	6.38	0.012		0.02	0.01	0.2		0.16
C-AB	0.07	10.13	0.007		0.01	0.01	0.1		0.10
A-B	0.07								
A-C	6.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.06	10.29	0.006		0.01	0.01	0.1		0.10
B-A	0.06	6.84	0.009		0.01	0.01	0.1		0.15
C-AB	0.06	10.43	0.006		0.01	0.01	0.1		0.10
A-B	0.06								
A-C	5.83								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	6.9	4.6	0.7	0.10	0.7	0.10
B-A	6.9	4.6	1.1	0.16	1.1	0.16
C-AB	6.9	4.6	0.7	0.10	0.7	0.10
A-B	6.9	4.6				
A-C	640.0	426.7				
ALL	1351.7	901.1	2.5	0.00	2.5	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Base PM Peak Hour

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.04	12.06	8.04
ARM B	15.00	45.00	75.00	0.13	0.19	0.13
ARM C	15.00	45.00	75.00	7.13	10.69	7.13

Demand set: 2016 Base PM Peak Hour

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 17.00	ARM A	0.000	0.008	0.992
		0.0	5.0	638.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		5.0	0.0	5.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.991	0.009	0.000
		565.0	5.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Base PM Peak Hour
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.06	9.73	0.006		0.00	0.01	0.1		0.10
B-A	0.06	6.19	0.010		0.00	0.01	0.1		0.16
C-AB	0.06	9.86	0.006		0.00	0.01	0.1		0.10
A-B	0.06								
A-C	8.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.07	9.32	0.008		0.01	0.01	0.1		0.11
B-A	0.07	5.60	0.013		0.01	0.01	0.2		0.18
C-AB	0.07	9.45	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	9.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.09	8.75	0.010		0.01	0.01	0.2		0.12
B-A	0.09	4.79	0.019		0.01	0.02	0.3		0.21
C-AB	0.09	8.88	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	11.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.09	8.75	0.010		0.01	0.01	0.2		0.12
B-A	0.09	4.79	0.019		0.02	0.02	0.3		0.21
C-AB	0.09	8.88	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	11.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.07	9.32	0.008		0.01	0.01	0.1		0.11
B-A	0.07	5.60	0.013		0.02	0.01	0.2		0.18
C-AB	0.07	9.45	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	9.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.06	9.73	0.006		0.01	0.01	0.1		0.10
B-A	0.06	6.19	0.010		0.01	0.01	0.2		0.16
C-AB	0.06	9.86	0.006		0.01	0.01	0.1		0.10
A-B	0.06								
A-C	8.01								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	6.9	4.6	0.8	0.11	0.8	0.11
B-A	6.9	4.6	1.3	0.19	1.3	0.19
C-AB	6.9	4.6	0.8	0.11	0.8	0.11
A-B	6.9	4.6				
A-C	878.2	585.4				
ALL	1683.4	1122.2	2.8	0.00	2.8	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2026 Base AM Peak Hour

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.70	10.05	6.70
ARM B	15.00	45.00	75.00	0.15	0.23	0.15
ARM C	15.00	45.00	75.00	7.13	10.69	7.13

Demand set: 2026 Base AM Peak Hour

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 08.00				
	ARM A	0.000	0.011	0.989
		0.0	6.0	530.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		6.0	0.0	6.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.989	0.011	0.000
		564.0	6.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base AM Peak Hour
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.08	10.07	0.007		0.00	0.01	0.1		0.10
B-A	0.08	6.51	0.012		0.00	0.01	0.2		0.16
C-AB	0.08	10.21	0.007		0.00	0.01	0.1		0.10
A-B	0.08								
A-C	6.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.09	9.73	0.009		0.01	0.01	0.1		0.10
B-A	0.09	5.98	0.015		0.01	0.02	0.2		0.17
C-AB	0.09	9.87	0.009		0.01	0.01	0.1		0.10
A-B	0.09								
A-C	7.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.11	9.25	0.012		0.01	0.01	0.2		0.11
B-A	0.11	5.26	0.021		0.02	0.02	0.3		0.19
C-AB	0.11	9.39	0.012		0.01	0.01	0.2		0.11
A-B	0.11								
A-C	9.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.11	9.25	0.012		0.01	0.01	0.2		0.11
B-A	0.11	5.26	0.021		0.02	0.02	0.3		0.19
C-AB	0.11	9.39	0.012		0.01	0.01	0.2		0.11
A-B	0.11								
A-C	9.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.09	9.73	0.009		0.01	0.01	0.1		0.10
B-A	0.09	5.98	0.015		0.02	0.02	0.2		0.17
C-AB	0.09	9.87	0.009		0.01	0.01	0.1		0.10
A-B	0.09								
A-C	7.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.08	10.07	0.007		0.01	0.01	0.1		0.10
B-A	0.08	6.51	0.012		0.02	0.01	0.2		0.16
C-AB	0.08	10.21	0.007		0.01	0.01	0.1		0.10
A-B	0.08								
A-C	6.65								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	8.3	5.5	0.9	0.10	0.9	0.10
B-A	8.3	5.5	1.4	0.17	1.4	0.17
C-AB	8.3	5.5	0.9	0.10	0.9	0.10
A-B	8.3	5.5				
A-C	729.5	486.3				
ALL	1538.8	1025.9	3.2	0.00	3.2	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
718.74	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2026 Base PM Peak Hour

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	9.26	13.89	9.26
ARM B	15.00	45.00	75.00	0.15	0.23	0.15
ARM C	15.00	45.00	75.00	8.23	12.34	8.23

Demand set: 2026 Base PM Peak Hour

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 17.00	ARM A	0.000	0.008	0.992
		0.0	6.0	735.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		6.0	0.0	6.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.991	0.009	0.000
		652.0	6.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base PM Peak Hour
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.08	9.40	0.008		0.00	0.01	0.1		0.11
B-A	0.08	5.72	0.013		0.00	0.01	0.2		0.18
C-AB	0.08	9.54	0.008		0.00	0.01	0.1		0.11
A-B	0.08								
A-C	9.22								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.09	8.93	0.010		0.01	0.01	0.1		0.11
B-A	0.09	5.05	0.018		0.01	0.02	0.3		0.20
C-AB	0.09	9.06	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	11.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.11	8.27	0.013		0.01	0.01	0.2		0.12
B-A	0.11	4.11	0.027		0.02	0.03	0.4		0.25
C-AB	0.11	8.41	0.013		0.01	0.01	0.2		0.12
A-B	0.11								
A-C	13.49								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.11	8.27	0.013		0.01	0.01	0.2		0.12
B-A	0.11	4.11	0.027		0.03	0.03	0.4		0.25
C-AB	0.11	8.41	0.013		0.01	0.01	0.2		0.12
A-B	0.11								
A-C	13.49								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.09	8.93	0.010		0.01	0.01	0.2		0.11
B-A	0.09	5.05	0.018		0.03	0.02	0.3		0.20
C-AB	0.09	9.06	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	11.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.08	9.40	0.008		0.01	0.01	0.1		0.11
B-A	0.08	5.72	0.013		0.02	0.01	0.2		0.18
C-AB	0.08	9.54	0.008		0.01	0.01	0.1		0.11
A-B	0.08								
A-C	9.22								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	8.3	5.5	0.9	0.11	0.9	0.11
B-A	8.3	5.5	1.7	0.21	1.7	0.21
C-AB	8.3	5.5	0.9	0.11	0.9	0.11
A-B	8.3	5.5				
A-C	1011.7	674.4				
ALL	1942.1	1294.8	3.6	0.00	3.6	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 15:43:10 on 11/07/2014]

TRL LIMITED

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 4.0 (SEPT 2008)

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE BUREAU
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: Software@trl.co.uk

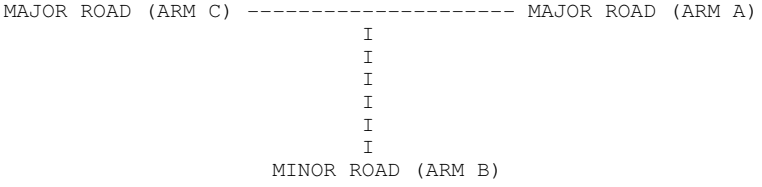
Run with file:-
"W:\Jobs\1063308 Church Stretton\05 Info & Calcs\03 Calculations\Calcs 06 - Junction Modelling\
Proposed Site Access.vpi"
(drive-on-the-left) at 15:32:07 on Friday, 11 July 2014

RUN INFORMATION
****

RUN TITLE	: Proposed Site Access
LOCATION	: New House Farm, Church Stretton
DATE	: 11/07/14
CLIENT	:
ENUMERATOR	: JRathmel
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA



ARM A IS A49 North
ARM B IS Site Access
ARM C IS A49 South

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)250.00 M.
- BLOCKS TRAFFIC	NO
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 22.0 M.
- VISIBILITY TO RIGHT	(VB-A) 32.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	7.18 M.
WIDTH AT 10 M FROM JUNCTION	4.17 M.
WIDTH AT 15 M FROM JUNCTION	3.30 M.
WIDTH AT 20 M FROM JUNCTION	3.31 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
820.43	0.30	0.30

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Base + Dev AM Peak Hour

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.97	8.96	5.97
ARM B	15.00	45.00	75.00	0.63	0.94	0.63
ARM C	15.00	45.00	75.00	6.36	9.54	6.36

Demand set: 2016 Base + Dev AM Peak Hour

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 08.00				
	ARM A	0.000	0.027	0.973
		0.0	13.0	465.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.500	0.000	0.500
		25.0	0.0	25.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.976	0.024	0.000
		497.0	12.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Base + Dev AM Peak Hour
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.31	10.42	0.030		0.00	0.03	0.4		0.10
B-A	0.31	6.92	0.045		0.00	0.05	0.7		0.15
C-A	6.24								
C-B	0.15	11.85	0.013		0.00	0.01	0.2		0.09
A-B	0.16								
A-C	5.83								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.37	10.08	0.037		0.03	0.04	0.6		0.10
B-A	0.37	6.44	0.058		0.05	0.06	0.9		0.16
C-A	7.45								
C-B	0.18	11.50	0.016		0.01	0.02	0.2		0.09
A-B	0.19								
A-C	6.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.46	9.60	0.048		0.04	0.05	0.7		0.11
B-A	0.46	5.77	0.080		0.06	0.09	1.2		0.19
C-A	9.12								
C-B	0.22	11.01	0.020		0.02	0.02	0.3		0.09
A-B	0.24								
A-C	8.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.46	9.60	0.048		0.05	0.05	0.7		0.11
B-A	0.46	5.77	0.080		0.09	0.09	1.3		0.19
C-A	9.12								
C-B	0.22	11.01	0.020		0.02	0.02	0.3		0.09
A-B	0.24								
A-C	8.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.37	10.07	0.037		0.05	0.04	0.6		0.10
B-A	0.37	6.44	0.058		0.09	0.06	1.0		0.16
C-A	7.45								
C-B	0.18	11.50	0.016		0.02	0.02	0.2		0.09
A-B	0.19								
A-C	6.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.31	10.41	0.030		0.04	0.03	0.5		0.10
B-A	0.31	6.92	0.045		0.06	0.05	0.7		0.15
C-A	6.24								
C-B	0.15	11.85	0.013		0.02	0.01	0.2		0.09
A-B	0.16								
A-C	5.83								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	34.4	22.9	3.6	0.10	3.6	0.10
B-A	34.4	22.9	5.8	0.17	5.8	0.17
C-A	684.1	456.1				
C-B	16.5	11.0	1.5	0.09	1.5	0.09
A-B	17.9	11.9				
A-C	640.0	426.7				
ALL	1427.4	951.6	10.8	0.01	10.8	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
820.43	0.30	0.30

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Base + Dev PM Peak Hour

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.32	12.49	8.32
ARM B	15.00	45.00	75.00	0.36	0.54	0.36
ARM C	15.00	45.00	75.00	7.44	11.16	7.44

Demand set: 2016 Base + Dev PM Peak Hour

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 17.00	ARM A	0.000	0.042	0.958
		0.0	28.0	638.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.483	0.000	0.517
		14.0	0.0	15.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.950	0.050	0.000
		565.0	30.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Base + Dev PM Peak Hour
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.19	9.91	0.019		0.00	0.02	0.3		0.10
B-A	0.18	6.12	0.029		0.00	0.03	0.4		0.17
C-A	7.09								
C-B	0.38	11.13	0.034		0.00	0.03	0.5		0.09
A-B	0.35								
A-C	8.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.22	9.46	0.024		0.02	0.02	0.4		0.11
B-A	0.21	5.48	0.038		0.03	0.04	0.6		0.19
C-A	8.47								
C-B	0.45	10.64	0.042		0.03	0.04	0.6		0.10
A-B	0.42								
A-C	9.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.28	8.84	0.031		0.02	0.03	0.5		0.12
B-A	0.26	4.61	0.056		0.04	0.06	0.8		0.23
C-A	10.37								
C-B	0.55	9.96	0.055		0.04	0.06	0.9		0.11
A-B	0.51								
A-C	11.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.28	8.84	0.031		0.03	0.03	0.5		0.12
B-A	0.26	4.61	0.056		0.06	0.06	0.9		0.23
C-A	10.37								
C-B	0.55	9.96	0.055		0.06	0.06	0.9		0.11
A-B	0.51								
A-C	11.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.22	9.46	0.024		0.03	0.02	0.4		0.11
B-A	0.21	5.48	0.038		0.06	0.04	0.6		0.19
C-A	8.47								
C-B	0.45	10.64	0.042		0.06	0.04	0.7		0.10
A-B	0.42								
A-C	9.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.19	9.91	0.019		0.02	0.02	0.3		0.10
B-A	0.18	6.12	0.029		0.04	0.03	0.5		0.17
C-A	7.09								
C-B	0.38	11.13	0.034		0.04	0.04	0.5		0.09
A-B	0.35								
A-C	8.01								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	20.6	13.8	2.3	0.11	2.3	0.11
B-A	19.3	12.8	3.8	0.20	3.8	0.20
C-A	777.7	518.5				
C-B	41.3	27.5	4.1	0.10	4.1	0.10
A-B	38.5	25.7				
A-C	878.2	585.4				
ALL	1775.6	1183.7	10.2	0.01	10.2	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
820.43	0.30	0.30

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2026 Base + Dev AM Peak Hour

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.80	10.20	6.80
ARM B	15.00	45.00	75.00	0.65	0.97	0.65
ARM C	15.00	45.00	75.00	7.21	10.82	7.21

Demand set: 2026 Base + Dev AM Peak Hour

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 08.00	ARM A	0.000	0.026	0.974
		0.0	14.0	530.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.500	0.000	0.500
		26.0	0.0	26.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.977	0.023	0.000
		564.0	13.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Dev AM Peak Hour
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.33	10.19	0.032		0.00	0.03	0.5		0.10
B-A	0.33	6.58	0.050		0.00	0.05	0.7		0.16
C-A	7.08								
C-B	0.16	11.60	0.014		0.00	0.01	0.2		0.09
A-B	0.18								
A-C	6.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.39	9.80	0.040		0.03	0.04	0.6		0.11
B-A	0.39	6.03	0.065		0.05	0.07	1.0		0.18
C-A	8.45								
C-B	0.19	11.20	0.017		0.01	0.02	0.3		0.09
A-B	0.21								
A-C	7.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.48	9.25	0.052		0.04	0.05	0.8		0.11
B-A	0.48	5.27	0.091		0.07	0.10	1.4		0.21
C-A	10.35								
C-B	0.24	10.64	0.022		0.02	0.02	0.3		0.10
A-B	0.26								
A-C	9.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.48	9.25	0.052		0.05	0.05	0.8		0.11
B-A	0.48	5.27	0.091		0.10	0.10	1.5		0.21
C-A	10.35								
C-B	0.24	10.64	0.022		0.02	0.02	0.3		0.10
A-B	0.26								
A-C	9.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.39	9.80	0.040		0.05	0.04	0.6		0.11
B-A	0.39	6.03	0.065		0.10	0.07	1.1		0.18
C-A	8.45								
C-B	0.19	11.20	0.017		0.02	0.02	0.3		0.09
A-B	0.21								
A-C	7.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.33	10.18	0.032		0.04	0.03	0.5		0.10
B-A	0.33	6.58	0.050		0.07	0.05	0.8		0.16
C-A	7.08								
C-B	0.16	11.60	0.014		0.02	0.01	0.2		0.09
A-B	0.18								
A-C	6.65								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	35.8	23.9	3.8	0.11	3.8	0.11
B-A	35.8	23.9	6.5	0.18	6.5	0.18
C-A	776.3	517.5				
C-B	17.9	11.9	1.6	0.09	1.6	0.09
A-B	19.3	12.8				
A-C	729.5	486.3				
ALL	1614.5	1076.4	12.0	0.01	12.0	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
820.43	0.30	0.30

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2026 Base + Dev PM Peak Hour

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	9.55	14.33	9.55
ARM B	15.00	45.00	75.00	0.39	0.58	0.39
ARM C	15.00	45.00	75.00	8.54	12.81	8.54

Demand set: 2026 Base + Dev PM Peak Hour

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 17.00	ARM A	0.000	0.038	0.962
		0.0	29.0	735.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.484	0.000	0.516
		15.0	0.0	16.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.955	0.045	0.000
		652.0	31.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Dev PM Peak Hour
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.20	9.57	0.021		0.00	0.02	0.3		0.11
B-A	0.19	5.64	0.033		0.00	0.03	0.5		0.18
C-A	8.18								
C-B	0.39	10.76	0.036		0.00	0.04	0.5		0.10
A-B	0.36								
A-C	9.22								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.24	9.05	0.026		0.02	0.03	0.4		0.11
B-A	0.22	4.92	0.046		0.03	0.05	0.7		0.21
C-A	9.77								
C-B	0.46	10.19	0.046		0.04	0.05	0.7		0.10
A-B	0.43								
A-C	11.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.29	8.32	0.035		0.03	0.04	0.5		0.12
B-A	0.28	3.91	0.070		0.05	0.07	1.1		0.27
C-A	11.96								
C-B	0.57	9.41	0.060		0.05	0.06	0.9		0.11
A-B	0.53								
A-C	13.49								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.29	8.32	0.035		0.04	0.04	0.5		0.12
B-A	0.28	3.91	0.070		0.07	0.07	1.1		0.27
C-A	11.96								
C-B	0.57	9.41	0.060		0.06	0.06	1.0		0.11
A-B	0.53								
A-C	13.49								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.24	9.05	0.026		0.04	0.03	0.4		0.11
B-A	0.22	4.92	0.046		0.07	0.05	0.8		0.21
C-A	9.77								
C-B	0.46	10.19	0.046		0.06	0.05	0.7		0.10
A-B	0.43								
A-C	11.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.20	9.57	0.021		0.03	0.02	0.3		0.11
B-A	0.19	5.64	0.033		0.05	0.03	0.5		0.18
C-A	8.18								
C-B	0.39	10.76	0.036		0.05	0.04	0.6		0.10
A-B	0.36								
A-C	9.22								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

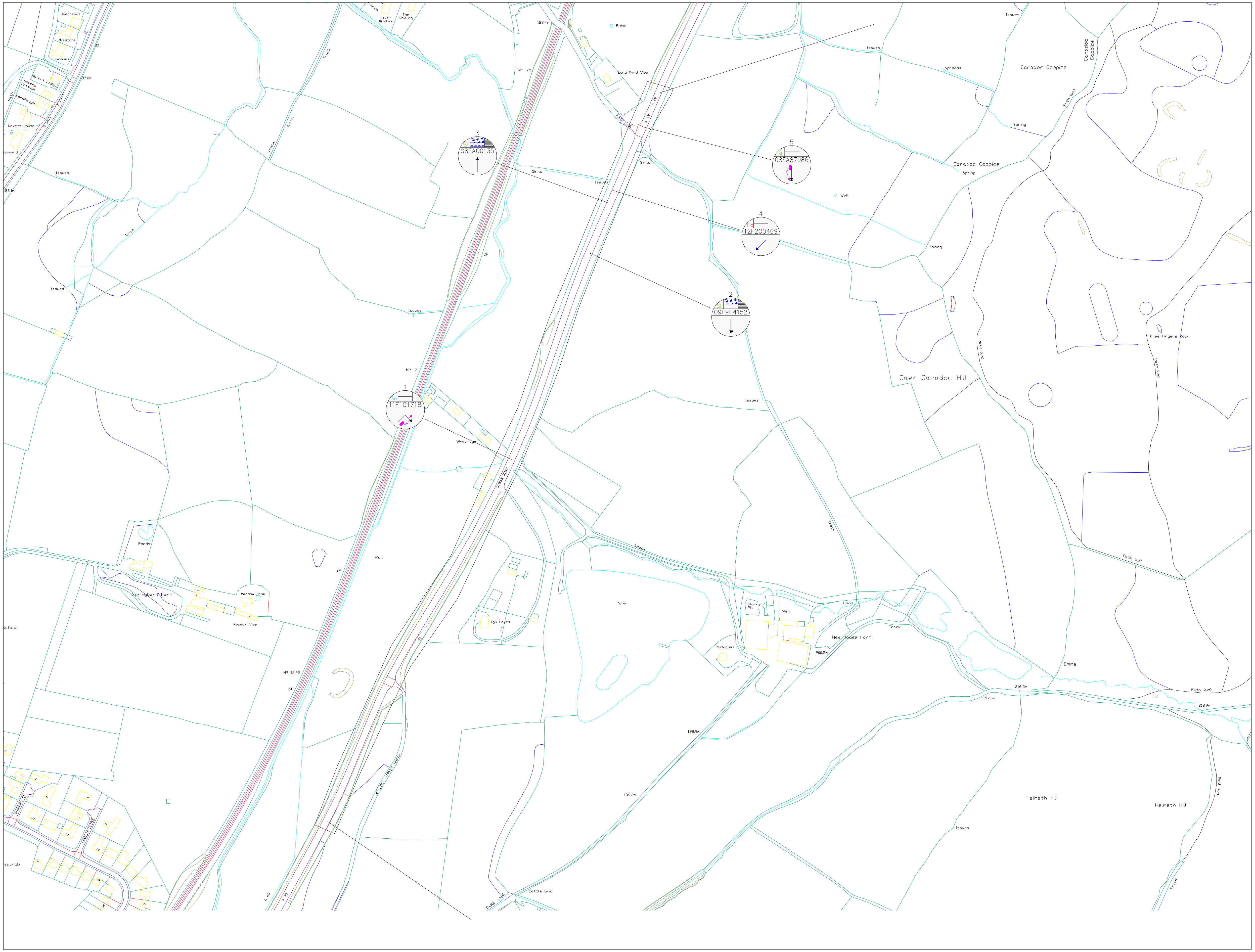
STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	22.0	14.7	2.5	0.12	2.5	0.12
B-A	20.6	13.8	4.7	0.23	4.7	0.23
C-A	897.4	598.3				
C-B	42.7	28.4	4.5	0.10	4.5	0.10
A-B	39.9	26.6				
A-C	1011.7	674.4				
ALL	2034.4	1356.2	11.6	0.01	11.6	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 15:44:03 on 11/07/2014]



Overwoods
Milestone
Novers Lodge
Novers Cottage
Novers House
Issues
Drain
FB
Track
Silver Birches
The Shieling
183.4m
MP .75
Pond
Long Mynd View
Spreads
Caradoc Coppice
Spring
Well
Sinks
SP
MP 12
Windyridge
Caer Caradoc Hill
Three Fingers Rock
Path (um)
Ponds
Springbank Farm
Meadow Bank
Meadow View
School
MP 12.25
High Leyes
Slurry Pit
Ford
New House Farm
Parklands
220.5m
Cwms
216.3m
217.5m
218.9m
198.9m
199.2m
Helmeth Hill
Cattle Grid
Watling Street North
A 49
1
11F101718
2
09F904152
3
08FA00135
4
12F200469
5
08FA87986

Full Details Report Summary - IDHCDR1550 A49 New House Farm Church Stretton

Accidents Found Date Range: 09/02/2008 - 30/01/2012

Grid Coordinate Range: 346291,294563 - 346455,294978

Database: "d:\keyaccident\databases\area 9"
Query Conditions: 01/01/2008 - 31/12/2012 Search Conditions:

Accident Severity

	2008	2009	2011	2012	Total
Fatal	**0**	**0**	**0**	**1**	**1**
Serious	**0**	**0**	**1**	**0**	**1**
Slight	**2**	**1**	**0**	**0**	**3**
Total	**2**	**1**	**1**	**1**	**5**

Casualty Severity

	2008	2009	2011	2012	Total
Fatal	**0**	**0**	**0**	**1**	**1**
Serious	**0**	**0**	**1**	**2**	**3**
Slight	**2**	**2**	**0**	**0**	**4**
Total	**2**	**2**	**1**	**3**	**8**

Casualty KSI

	2008	2009	2011	2012	Total
Adult KSI	**0**	**0**	**1**	**3**	**4**
Slight	**2**	**2**	**0**	**0**	**4**
Total	**2**	**2**	**1**	**3**	**8**

Accident Reference:11F101718 Serious A49 AT CHURCH STRETTON ,J/W TURN TO NEW HOUSE FARM , Accident 1 of 5

Date & time.....Sunday 01/05/2011 12:00
Grid reference.....346291/294563
District.....286
Primary road.....A49
Secondary road.....0
Weather.....Fine
Lighting.....Light/no lights
Crossing(human).....No Human control within 50m
Crossing(physical)..No crossing facility within 50m
Speed limit.....60 Mph
Road type.....Single c'way
Junction detail.....Using private drive or entrance
Junction control.....Give way sign or uncontrolled
Special conditions...None
Carriageway hazards..None
Number of vehicles...2
Number of casualties.1
Surface.....Dry

Contributory Factors	Participant	Confidence	Did a police officer attend?
Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 002	Very likely	
Failed to look properly (Driver/Rider - Error)	Vehicle 002	Very likely	
Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 002	Very likely	Yes

Accident Description
VEHICLE 1 TRAVELLING NORTH COMMITTED TO A RIGHT HAND BEND INTO NEW HOUSE FARM VEHICLE 2 TRAVELLING NORTH COMMITTED TO CONSIDERED SAFE OVER TAKE OF VEHICLE 3.SUSPECTED THAT VEHICLE 2 AND 3 OF THESE VEHICLES SHEIELDED VIEW OF VEHICLE 1 WHICH HAD SLOWED AND WAS INDICATING,VEHICLE 1 TURNED RIGHT INTO THE PATH OF VEHICLE 2

2 Vehicles

Vehicle number.....1
Other vehicle.....0
Vehicle class.....Car
Junction location...Leaving main road
Restricted location.On main carriageway
Direction.....South west South east
Manoeuvres.....Turning right
Skidding.....No
Left c'way.....Did not leave c'way
Towing.....No
Foreign vehicle.....Not foreign
First impact.....Offside
Hit object in c'way..None
Hit object off c'way.None
Parts damaged..... / /
Driver gender.....Male
Driver age.....43
Hit and Run.....No
Breath test.....Negative
Journey purpose.....

Vehicle number.....2
Other vehicle.....1
Vehicle class.....M/cycle > 500cc
Junction location...Mid junction
Restricted location.On main carriageway
Direction.....South west North east
Manoeuvres.....O/T moving vehicle on its O/S
Skidding.....Yes
Left c'way.....Left c'way Offside
Towing.....No
Foreign vehicle.....Not foreign
First impact.....Front
Hit object in c'way..None
Hit object off c'way.Entered ditch
Parts damaged..... / /
Driver gender.....Male
Driver age.....64
Hit and Run.....No
Breath test.....Not provided
Journey purpose.....

1 Casualty

Casualty number.....1
Casualty class.....Driver or Rider
Gender.....Male
Age.....64
Severity.....Serious
Vehicle no.....2
Ped Direction.....Not a pedestrian
Car passenger.....No
PSV passenger.....No
Seat belt usage.....
School pupil.....Other
School .....
Pedestrian location..Not a pedestrian
Pedestrian movement..Not a pedestrian
Roadworker injured...No

Accident Reference:09F904152 Slight A 49,CHURCH STRETTON,160 M S J/W FARM LANE, Accident 2 of 5

Date & time.....Friday 31/07/2009 21:53
Grid reference.....346390/294820
District.....South Shropshire
Primary road.....A49
Secondary road.....
Weather.....Rain
Lighting.....Dark/no lights
Crossing(human).....No Human control within 50m
Crossing(physical)..No crossing facility within 50m

Speed limit.....60 Mph
Road type.....Single c'way
Junction detail.....Not at or within 20m of junction
Junction control.....
Special conditions...None
Carriageway hazards..Animal in c'way
Number of vehicles...2
Number of casualties.2
Surface.....Dry

Contributory Factors	Participant	Confidence	Did a police officer attend?
Animal or object in carriageway (Road Environment Contrib)	Vehicle 001	Very likely	
Slippery road due to weather (Road Environment Contrib)	Vehicle 001	Possible	
Following too close (Drive/Rider - Injudicious)	Vehicle 001	Very likely	Yes

Accident Description
DRIVER OF V1 STATES THAT HE WAS TRAVELLING ALONG THE A49 WHEN V2 HAS BRAKED TO AVOID SHEEP IN THE ROAD. DRIVER OF V1 HAS FAILED TO STOP AND HAS COLLIDED WITH REAR OF V2 CAUSING DAMAGE AND INJURY

2 Vehicles

Vehicle number.....1
Other vehicle.....0
Vehicle class.....Car
Junction location...Not at junction
Restricted location.On main carriageway
Direction.....North South
Manoeuvres.....Stopping
Skidding.....No
Left c'way.....Did not leave c'way
Towing.....No
Foreign vehicle.....Not foreign

First impact.....Front
Hit object in c'way..None
Hit object off c'way.None
Parts damaged..... / /
Driver gender.....Male
Driver age.....19
Hit and Run.....No
Breath test.....Negative
Journey purpose.....

Vehicle number.....2
Other vehicle.....0
Vehicle class.....Car
Junction location...Not at junction
Restricted location.On main carriageway
Direction.....North South
Manoeuvres.....Stopping
Skidding.....No
Left c'way.....Did not leave c'way
Towing.....No
Foreign vehicle.....Not foreign

First impact.....Back
Hit object in c'way..None
Hit object off c'way.None
Parts damaged..... / /
Driver gender.....Female
Driver age.....70
Hit and Run.....No
Breath test.....Negative
Journey purpose.....

2 Casualties

Casualty number.....1
Casualty class.....Driver or Rider
Gender.....Female
Age.....70
Severity.....Slight
Vehicle no.....2
Ped Direction.....Not a pedestrian

Car passenger.....No
PSV passenger.....No
Seat belt usage.....
School pupil.....Other
School .....
Pedestrian location..Not a pedestrian
Pedestrian movement..Not a pedestrian
Roadworker injured...No

Casualty number.....2
Casualty class.....Passenger
Gender.....Female
Age.....19
Severity.....Slight
Vehicle no.....1
Ped Direction.....Not a pedestrian

Car passenger.....Front
PSV passenger.....No
Seat belt usage.....
School pupil.....Other
School .....
Pedestrian location..Not a pedestrian
Pedestrian movement..Not a pedestrian
Roadworker injured...No

Accident Reference:08FA00135 Slight A 49 NB, ALL STRETTON APPROX 100 M S J/W FARM LANE. Accident 3 of 5

Date & time.....Sunday 09/11/2008 19:20
Grid reference.....346412/294883
District.....South Shropshire
Primary road.....A49
Secondary road.....
Weather.....Rain
Lighting.....Dark/no lights
Crossing(human).....No Human control within 50m
Crossing(physical)..No crossing facility within 50m
Speed limit.....60 Mph
Road type.....Single c'way
Junction detail.....Not at or within 20m of junction
Junction control.....
Special conditions...None
Carriageway hazards..None
Number of vehicles...1
Number of casualties.1
Surface.....Flood

Contributory Factors	Participant	Confidence	Did a police officer attend?
Impaired by alcohol (Driver/Rider - Impairment)	Vehicle 001	Very likely	Yes
Loss of control (Driver/Rider - Error)	Vehicle 001	Very likely	

Accident Description
DR V1 TRAVELLING ON UNLIT A CLASS RD FAILS TO SEE RD IS FLOODED, DR V1 LOSES CONTROL ON IMPACTING WATER, V1 LEAVES CW TO OS ONTO VERGE.

1 Vehicle

Vehicle number.....1
Other vehicle.....0
Vehicle class.....Car
Junction location...Not at junction
Restricted location.On main carriageway
Direction.....South North
Manoeuvres.....Going ahead other
Skidding.....No
Left c'way.....Left c'way Offside
Towing.....No
Foreign vehicle.....Not foreign
First impact.....Front
Hit object in c'way..None
Hit object off c'way.None
Parts damaged..... / /
Driver gender.....Female
Driver age.....46
Hit and Run.....No
Breath test.....Positive
Journey purpose.....

1 Casualty

Casualty number.....1
Casualty class.....Driver or Rider
Gender.....Female
Age.....46
Severity.....Slight
Vehicle no.....1
Ped Direction.....Not a pedestrian
Car passenger.....No
PSV passenger.....No
Seat belt usage.....
School pupil.....Other
School .....
Pedestrian location..Not a pedestrian
Pedestrian movement..Not a pedestrian
Roadworker injured...No

Accident Reference:12F200469 Fatal A49 CHURCH STRETTON ,APPROX 80 MT SW FARM LANE, Accident 4 of 5

Date & time.....Monday 30/01/2012 10:37
Grid reference.....346417/294899
District.....286
Primary road.....A49
Secondary road.....
Weather.....Fine
Lighting.....Light/no lights
Crossing(human).....No Human control within 50m
Crossing(physical)..No crossing facility within 50m

Speed limit.....50 Mph
Road type.....Single c'way
Junction detail.....Not at or within 20m of junction
Junction control.....
Special conditions...None
Carriageway hazards..None
Number of vehicles...1
Number of casualties.3
Surface.....Dry

Contributory Factors	Participant	Confidence	Did a police officer attend?
Loss of control (Driver/Rider - Error)	Vehicle 1	Very likely	Yes
Fatigue (Driver/Rider - Impairment)	Vehicle 1	Possible	
Illness or disability, mental or physical (Driver/Rider - Impairment)	Vehicle 1	Possible	

Accident Description
WITNESS EVIDENCE WOULD SUGGEST THAT THIS VEHICLE HAS VEERED TO ITS OFFSIDE ACROSS THE OPPOSING CARRIAGEWAY AND BEYOND ONTO A FLAT GRASS VERGE AND INTO A TREE LEAVING THE FIELD BEYOND. SUBSTANIAL IMPACT TO FRONT OFFSIDE

1 Vehicle

Vehicle number.....1
Other vehicle.....0
Vehicle class.....Goods < 3.5t
Junction location...Not at junction
Restricted location.On main carriageway
Direction.....North east South west
Manoeuvres.....Going ahead other
Skidding.....No
Left c'way.....Left c'way Offside
Towing.....No
Foreign vehicle.....Not foreign

First impact.....Front
Hit object in c'way..None
Hit object off c'way.Tree
Parts damaged..... / /
Driver gender.....Male
Driver age.....51
Hit and Run.....No
Breath test.....Not provided
Journey purpose.....Journey as part of work

3 Casualties

Casualty number.....1
Casualty class.....Driver or Rider
Gender.....Male
Age.....51
Severity.....Serious
Vehicle no.....1
Ped Direction.....Not a pedestrian

Car passenger.....No
PSV passenger.....No
Seat belt usage.....
School pupil.....Other
School .....
Pedestrian location..Not a pedestrian
Pedestrian movement..Not a pedestrian
Roadworker injured...No

Casualty number.....2
Casualty class.....Passenger
Gender.....Male
Age.....56
Severity.....Fatal
Vehicle no.....1
Ped Direction.....Not a pedestrian

Car passenger.....No
PSV passenger.....No
Seat belt usage.....
School pupil.....Other
School .....
Pedestrian location..Not a pedestrian
Pedestrian movement..Not a pedestrian
Roadworker injured...No

Casualty number.....3
Casualty class.....Passenger
Gender.....Male
Age.....41
Severity.....Serious
Vehicle no.....1
Ped Direction.....Not a pedestrian

Car passenger.....No
PSV passenger.....No
Seat belt usage.....
School pupil.....Other
School .....
Pedestrian location..Not a pedestrian
Pedestrian movement..Not a pedestrian
Roadworker injured...No

Accident Reference:08FA87986 Slight A49 AT ALL STRETTON J/W FARM LANE NR CHURCH STRETTON Accident 5 of 5

Date & time.....Saturday 09/02/2008 15:12
Grid reference.....346455/294978
District.....South Shropshire
Primary road.....A49
Secondary road.....
Weather.....Fine
Lighting.....Light/with lights
Crossing(human).....No Human control within 50m
Crossing(physical)..No crossing facility within 50m

Speed limit.....60 Mph
Road type.....Single c'way
Junction detail.....T or Staggered junction
Junction control.....Give way sign or uncontrolled
Special conditions...None
Carriageway hazards..None
Number of vehicles...2
Number of casualties.1
Surface.....Dry

Contributory Factors	Participant	Confidence	Did a police officer attend?
Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	Very likely	Yes
Road layout e.g. bend, hill or narrow (Road Environment Contrib)	Vehicle 001	Very likely	
Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	Very likely	
Loss of control (Driver/Rider - Error)	Vehicle 001	Very likely	

Accident Description
BOTH VEHS TRAV SAME DIRECTION, ON APP JCT V2 MOVES OUT INTO RGT FILTER LANE, V1 M/CYCLE BEGINS TO O/TAKE, RIDER THEN BRAKES EXCESSIVLEY LOSES CONTROL FALLING OFF BIKE WHICH THEN COLL/W V2

2 Vehicles

Vehicle number.....1
Other vehicle.....2
Vehicle class.....M/cycle > 500cc
Junction location...Mid junction
Restricted location.On main carriageway
Direction.....North South
Manoeuvres.....O/T moving vehicle on its O/S
Skidding.....Yes
Left c'way.....Did not leave c'way
Towing.....No
Foreign vehicle.....Not foreign

First impact.....Front
Hit object in c'way..None
Hit object off c'way.None
Parts damaged..... / /
Driver gender.....Male
Driver age.....25
Hit and Run.....No
Breath test.....Negative
Journey purpose.....

Vehicle number.....2
Other vehicle.....1
Vehicle class.....Car
Junction location...Mid junction
Restricted location.On main carriageway
Direction.....North South
Manoeuvres.....Stopping
Skidding.....No
Left c'way.....Did not leave c'way
Towing.....No
Foreign vehicle.....Not foreign

First impact.....Back
Hit object in c'way..None
Hit object off c'way.None
Parts damaged..... / /
Driver gender.....Female
Driver age.....86
Hit and Run.....No
Breath test.....Negative
Journey purpose.....

1 Casualty

Casualty number.....1
Casualty class.....Driver or Rider
Gender.....Male
Age.....25
Severity.....Slight
Vehicle no.....1
Ped Direction.....Not a pedestrian

Car passenger.....No
PSV passenger.....No
Seat belt usage.....
School pupil.....Other
School .....
Pedestrian location..Not a pedestrian
Pedestrian movement..Not a pedestrian
Roadworker injured...No

1 NMU Audit Context Report

1.1 Introduction

The development proposals have a direct impact on the trunk road network and so, in accordance with DMRB HA 42/05, specific consideration has been given to Non-Motorised Users (NMUs). The DMRB defines these users as pedestrians, cyclists and equestrians, and states that NMU Audits should also give particular consideration to disabled users. The purpose of an NMU Audit is set out as follows:

"NMU Audits should promote consideration of NMU interests, and dialogue between the Project Sponsor and the Design Team in order to achieve optimum provision for NMUs within the constraints faced by the Design Team. Its objectives are to:

- *encourage the Design Team to take all reasonable opportunities to improve the service offered to NMUs;*
- *prevent conditions for NMUs being worsened by the introduction of Highway Schemes; and*
- *document design decisions that affect NMUs."*

The first stage in the NMU Audit process is the development of a Context Report, which involves the collation and presentation of all background information of relevance to NMUs. The scope of the Context Report is summarised as follows:

"The NMU Context Report must provide a summary of all available information relevant to existing and potential patterns of use by NMUs within the design life of the scheme. The NMU Context Report must also set out the opportunities and objectives to improve conditions for NMUs."

The background information required for the Context Report is contained throughout this TA and has been summarised in the section below for ease of reference.

1.2 NMU Audit Context Report

The following headings are in line with the recommended content of an NMU Audit Context Report for a small scheme, as set out in Appendix B of DMRB HA 42/05. The bulk of the information is provided elsewhere in this TA, with references provided where applicable.

Existing Site

The development site is currently agricultural land associated with New House Farm, located east of the A49, north east of the town of Church Stretton.

Vehicular access to the site from the wider highway network is currently achievable via the A49 / New House Farm access road junction. This junction is located to the north of the development site and north west of New House Farm itself. A priority junction with the A49 provides access to an unmetalled track which leads to New House Farm.

The A49 is a trunk road which forms part of the Highways Agency's (HA) network. It follows a broadly north-south alignment in the vicinity of the site and provides access to Shrewsbury to the north and to Ludlow, Leominster and Hereford to the south.

The Cwms Lane / Helmeth Road priority junction is located to the south west of the development site and provides access to the residential area which lies north of the B4371 Sandford Avenue. To the south, Helmeth Road becomes Watling Street North, which connects to the B4371 at a priority junction. The B4371 connects to the A49 at a signalised crossroads and provides access to Church Stretton town centre.

Cwms Lane is a sub-standard, narrow lane which runs in a south east to north west direction through the heart of the development site.

Scheme Description

The proposed highway scheme is to upgrade the existing A49 / New House Farm site access junction to provide a ghost island right turn facility. This will facilitate the safer movement of vehicles at this junction, to account for the anticipated increase in use resulting from the proposed development at New House Farm. The proposed development includes the construction of 85no. private residential properties and 16no. log cabins for holiday use. The existing New House Farm buildings and archery club will be retained in their current locations.

Provision of a ghost island will facilitate the safer movement of vehicles accessing the site by providing an area in the centre of the carriageway where a right turning vehicle can decelerate and wait for a gap in the opposing traffic, thereby reducing the likely incidence of tail end shunts. The provision of a ghost island also reduces the likelihood of accidents caused by drivers making dangerous overtaking manoeuvres as a result of queues forming behind a vehicle travelling slowly as it waits to turn right.

Whilst no improvements are proposed for the A49 / B4371 signalised junction further south, it is predicted that the construction of the proposed residential development will result in an increase in NMUs passing through this junction.

NMU Activity

There are currently no footways and no cycle provision on the A49 in the vicinity of the site access junction.

At the A49 / B4371 signalised junction, controlled pedestrian crossing facilities are provided on the southern and western arms, with dropped kerbs, tactile paving and pedestrian guardrails in place. A splitter island is located on the northern arm, providing an opportunity to cross the A49 and grassed verge as footways are present on both sides of the carriageway. There is no specific provision for cyclists at this junction.

The A49 is not part of the National Cycle Network within the vicinity of the site. The results of the ATC survey undertaken during June 2014 indicates that on an average weekday, a total of four cyclists per day travel in a northbound direction and a total of six cyclists per day travel in a southbound direction. In the event of a cyclist passing the site access junction, it is unlikely that conflicts with vehicles would occur, as the drivers would have clear visibility of the presence of any cyclist. As a result, no

specific provision is proposed for cyclists as part of the highway solution for this junction.

The results of the classified turning count undertaken at the A49 / B4371 signalised junction suggest that there is minimal use of the A49 by cyclists, with the exception of those cyclists travelling along the B4371 Sandford Avenue who cross the signalised junction. The survey results demonstrate a maximum AM peak hour flow of 7 cyclists travelling westbound along Sandford Avenue and 2 cyclists travelling eastbound, and a maximum PM peak hour flow of 8 cyclists travelling westbound and 5 travelling eastbound.

Pedestrian movements in the vicinity of the A49 / site access junction are likely to be rare, with a lack of footways and the fact that there are two defined walking routes from the development site to the town centre, as detailed below. No pedestrian movements were observed in the vicinity of the site access junction during the site visits which took place as part of the baseline data collection of the Transport Assessment.

Notwithstanding the above, there is the possibility of very occasional pedestrian movements due to the presence of a public footpath that exits onto the A49 immediately south of the site access junction. Another footpath, which appears to be a continuation of the former path, exits the A49 to the west approximately 100m north of the junction. There is, therefore a possible need for additional pedestrian facilities at the upgraded junction and a footway connection to link the two public footpath access points. This requirement will be discussed further with the local highway authority following the submission of the planning application.

The two principal pedestrian routes from the development site to the town centre are as follows:

- Along Cwms Lane, Watling Street North and then joining the footway on Sandford Avenue before crossing the A49 at the A49 / B4371 signalised junction; and

- Along Cwms Lane and then along the public footpath which crosses the open space to the west of Watling Street North and leads to the A49, where an informal crossing point exists. To the west of the A49, the route crosses open space and the railway line at a level crossing before joining Churchill Road. From here, Churchill Road provides access to town centre shops and to Church Stretton School and St. Lawrence Primary School on Shrewsbury Road.

The second of the two routes above is understood to be used by pupils walking from the residential area to the east of the A49 to Church Stretton School. In order to gauge the level of usage, a pedestrian count at the A49 crossing point was undertaken from 15:00 – 16:00 on Friday 20th June 2014, to coincide with pupils travelling home from school. However, during this period, only one adult pedestrian was observed using this route.

As stated in the Transport Assessment, it is proposed that potential improvement works are investigated for the two routes set out above, with these forming the basis for further discussions with the local highway authority following the submission of the planning application. It is considered at this stage that these may include the following:

- Provision of a pedestrian refuge island on the A49 in the location of the existing crossing point;

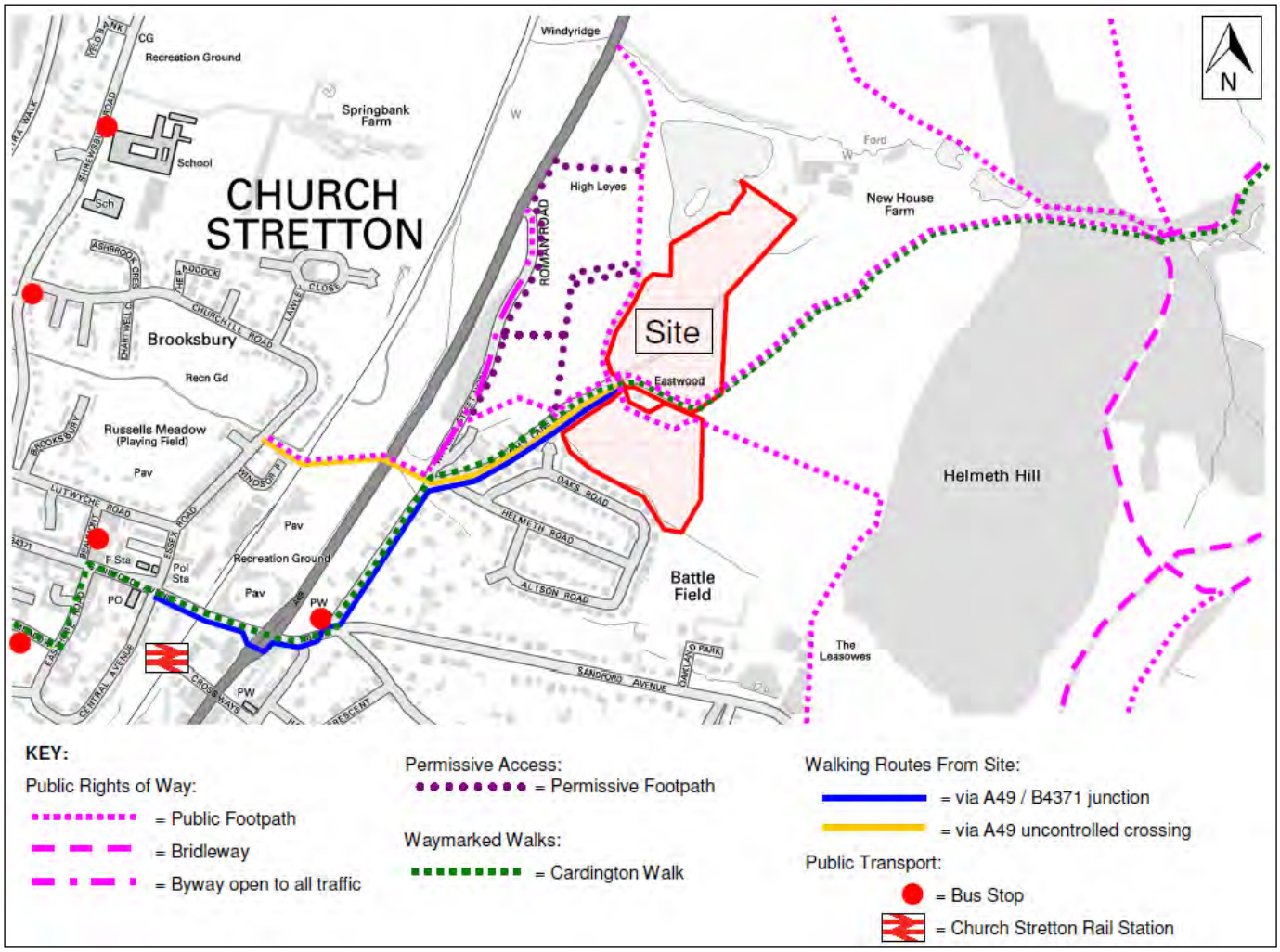
- Surface improvements to the existing pedestrian route where it passes through grassed areas of open space;

- Additional measures along Cwms Lane and Watling Street North, including provision of vertical traffic calming measures such as speed humps, provision of additional white lining, provision of additional street lighting and improvements to existing signage.

On Cwms Lane, in the centre of the development site, opposite the access to the Eastwood residential property, there is an existing sign which states that Church Stretton is accessible via a 0.7 mile walk, with a duration of 20 minutes. A similar sign exists at the southern end of Cwms Lane at its junction with Helmeth Road, which states that the town is accessible via a 0.5 mile walk, with a duration of 15 minutes. It can be calculated that a walking speed of 2mph has therefore been used in these calculations. These distances equate approximately to the location of the Sandford Avenue / Beaumont Road junction within the town.

According to Ordnance Survey mapping, there are a number of public rights of way (PROWs) which pass through the site, as shown in Figure 1-1 below, which provides an overview of all walking routes, footpaths and public transport facilities in the local area:

Figure 1-1 – Walking Routes and Public Transport Facilities



The PROWs which pass through the site are used for leisure by walkers accessing the hill walking area to the east, which includes Helmeth Hill and Caer Caradoc.

A local leisure walk known as the ‘Cardington Walk’ is signposted through the site with red waymarkers. This walk is one in a series of four waymarked walks around Church Stretton and is available as a leaflet from several outlets in the town centre. The route passes along Cwms Lane and to the east of the site towards Caer Caradoc and is shown on Figure 1-1 above.

There is a network of permissive footpaths to the west of the site, managed by Natural England. These paths link with the public footpaths in the area to create a number of circular walks through the numerous fields and woodland in this area. The permissive footpaths are shown on Figure 1-1 above.

In terms of equestrian movements, whilst there are bridleways located further east, on the eastern side of Helmeth Hill, there is no evidence to suggest that horse riding takes place in the vicinity of the site access junction.

Vehicle Flows and Speeds

An ATC was installed from Thursday 19th June until Wednesday 25th June on the derestricted section of the A49, to the north of the Church Stretton 30mph zone.

The daily traffic volumes and HGV proportions are summarised by day and by direction in Table 1-1 below:

Table 1-1 - Summary of Traffic Volume Data

Day	Northbound Flow	Southbound Flow	Two-Way Flow	Two-Way HGV %
Tuesday	5196	5381	10577	18.03%
Wednesday	5318	5513	10831	18.54%
Thursday	5185	5451	10636	17.88%
Friday	5943	6651	12594	15.39%
Saturday	4665	4893	9558	7.96%
Sunday	5100	4549	9649	7.12%
Average Weekday	***5411***	***5749***	***11160***	***17.37%***
Average Day	*5235*	*5406*	*10641*	*14.42%*

As shown in Table 1-1, daily traffic flows are highest on Fridays and significantly lower on weekends. On an average weekday, there is a two-way flow of 11,160 vehicles, with a proportion of HGVs of 17.37%.

The mean and 85th percentile vehicle speeds on an average weekday are summarised by direction in Table 1-2 below:

Table 1-2 - Mean and 85th Percentile Vehicle Speeds: Average Weekday

Northbound		Southbound		Two-Way	
Mean Speed	85th Percentile Speed	Mean Speed	85th Percentile Speed	Mean Speed	85th Percentile Speed
47.2	53.8	44.3	51.5	45.8	52.7

As shown in Table 1-2 above, southbound speeds are slightly lower, with this possibly attributable to vehicles slowing down on approach to the start of the 30mph speed restriction.

Accident Data

Personal Injury Accident (P.I.A.) data for the latest five-year period on the A49 in the vicinity of the site was obtained from the HA. The five-year period covered 1st January 2008 to 31st December 2012.

In the survey period, a total of five accidents occurred within the study area, resulting in eight casualties in total. This equates to an average of one accident and fewer than two casualties per year.

Of the five accidents that occurred, one of these was classified as fatal in terms of severity. One was classified as serious and the remaining three accidents were classified as slight. Of the 8 casualties that occurred, in terms of severity, one of these was fatal, three were serious and the remaining four were slight. Five of the casualties were the driver of the vehicle and three were passengers.

Three of the accidents occurred during daylight hours, with the remaining two accidents occurring after dark. Four of the accidents occurred during dry conditions, with the remaining accident occurring during a period where the road was flooded. None of the five accidents which have occurred involved either a pedestrian, cyclist or anyone of school age.

The number of accidents that has occurred over the latest five year period is not considered to be excessive for the number of vehicle movements in this location. A number of different factors were involved in the causes of the accidents including several instances of driver error. It is determined that there are no specific causational factors within the local highway or that the existing design of the highways was a material factor in these accidents having occurred. Furthermore, it has been demonstrated that the development will not introduce significant changes to the existing traffic flows.

Notwithstanding the above, the proposed provision of a ghost island facility at the site access junction will provide a safer environment for right turning vehicles to access the site.

NMU Objectives

Based on this background information, the objectives for this scheme for NMUs are:

- To ensure the continuity and convenience for those pedestrians using the local public footpath network;

- To ensure that the development proposals do not have a detrimental effect on the movement of any cyclists travelling along the A49;

- To ensure that the main NMU routes from the development site to the town centre are signposted appropriately, to minimise the use of the site access junction by NMUs; and

- To investigate potential improvements for the NMU routes between the development site and the town centre.

NMU Audit

Based on these objectives it is proposed that NMU Audit should be carried out at Completion of Construction.

Existing trees shown paler,
indicative additional trees shown darker

To Farm

Pond

External Shooting Range
(max. 90m range with 50m overshoot)

ARCHERY CENTRE

Club
House
& int
Range

possible entrance
to High Leyes

possible entrance to
14/01173/OUT*

RESIDENTIAL

CST033

possible entrance to
CST033 & CST034*

CST034

* N.B. Potential Entrances to CST033, CST034 & 14/01173/OUT, not forming part of this application is subject to both Landowners future agreement, and suitability of access and technical design

MORRIS PROPERTY

NEW HOUSE FARM, CHURCH STRETTON, MASTERPLAN

Scale 1:1250 @ A1
16004.01 revision K

architects

Les Stephan Planning Ltd.
Chartered Town Planners & Development Consultants

SUPPORTING STATEMENT

SHROPSHIRE LOCAL PLAN – REGULATION 18 CONSULTATION
(CONSULTATION 3rd August – 7th October 2020)

RELATING TO:

Key Centre: Church Stretton

Long Term Potential SLAA Site CST028 New House Farm, Church Stretton

9 Sweetlake Business Village · Longden Road · Shrewsbury · SY3 9EW
01743 231040 · www.LSPLtd.co.uk

PROJECT DETAILS

Prepared by:	Stuart Taylor
Date:	6th October 2020
Job No:	LSP/SAT/0013
Client Name:	Morris Property

CONTENT

1.0 Site Location
2.0 Purpose of Statement
3.0 Planning History and Appraisal
4.0 Sustainability Assessment
5.0 Conclusion
6.0 Supporting Plans & Reports

1.0 SITE LOCATION

1.1 Land to the north of Cwms Lane/ Oaks Road, Church Stretton. (The Battlefield site).

2.0 PURPOSE OF STATEMENT

2.1 1 To provide further evidence of the deliverability of the CST028 site in terms of its availability, achievability, suitability and viability to enable Shropshire Council to upgrade its status in the draft Local Plan (draft LP) from a "Long Term Potential Residential" site to an allocated site in Policy S5 of the Plan, in conjunction with an extension to the settlement boundary.

2.2 2 To enable Shropshire Council to meet the requirements of the NPPF in respect of delivering a sufficient supply of homes, and: -

2.3 3 To demonstrate that the site is capable of delivering, in Part 5 of the Pre-submission Draft Local Plan Consultation document, approximately 66 of the 250 dwellings needed in Church Stretton within the plan period.

2.4 The delivery of these dwellings will become increasingly important if the revised housing methodology for Shropshire becomes national policy in late 2020.

3.0 PLANNING HISTORY AND APPRAISAL

3.1 A planning application for the erection of 85 dwellings (reduced to 65 when the site north of Eastwood was removed from the application) was was submitted in September 2014, ref. 14/04374/OUT, accompanied by the following supporting reports: -

Heritage assessment.
Heritage England: No objection to reduced scheme of 65 dwellings

Flood Risk & Drainage Assessment
Environment Agency and Council's drainage officer: No objection subject to conditions

Ecological Assessment
Natural England and Council's ecology officer: No objection subject to

conditions

Landscape Visual Impact Assessment
AONB Partnership objection

Highways and Transport assessment
Highways England: No objection in principal subject to detailed scheme.
Shropshire Highways officer: requires more information on potential impacts on highways network and legality of stopping up Cwms Lane to vehicular traffic.

3.2 The 14/04374/OUT application was withdrawn on 29th October 2015.

3.3 The CST028 Battlefield site was submitted for consideration by the Shropshire Council policy planners in the first LPR consultation in October 2017 and also in the Preferred Sites consultation in February 2019.

3.4 The Feb 2019 submission included an updated Strategic Landscaping Plan for the New House Farm land as a whole but also made suggestions for landscaping of the CST028 housing site. (See Appendix 1)

3.5 This document will be further updated in conjunction with a new LVIA at the time of the next planning application on the CST028 site to include more detailed proposals for the landscaping of the site.

3.6 It is the housing proposals on the CST028 site, submitted as part of the masterplan in support of the October 2017 and February 2019 consultation responses which the landowner is re-submitting for consideration in the current draft LP Consultation. (See Appendix 2).

3.7 In the Consultation on Preferred Sites document, the Council policy officers acknowledge, in the Stage 3 Assessment, that the CST028 site *"has potential for allocation".*

3.8 This conclusion was reached after the policy officers consulted the Highways, Ecology, Heritage and Arboricultural Officers of the Council: -

3.9 **The Highways Officer** supported the proposals for providing access to the CST028 site from an upgraded junction on the A49 which currently serves

New House Farm subject to vehicular traffic from the site being prevented from travelling south along Cwms Lane.

3.10 In this regard a future planning application will include measures for upgrading Cwms Lane for pedestrian/cycle use and preventing additional motorised vehicular use.

3.11 **The Ecology Officer** requires updated ecological surveys to be carried out and wildlife corridors to be protected and enhanced.

3.12 The originally submitted surveys will be updated prior to the submission of a future planning application.

3.13 **The Arboricultural Officer** requires the submission of a BS5837 tree survey, an arboricultural impact analysis and method statement.

3.14 The concept site plan which accompanies this statement indicates that there is no intention or requirement to remove any of the trees and hedgerows which surround the site.

3.15 The existing trees and hedgerows will be supplemented with additional strategic landscape planting as indicated on the LVIA landscaping plan.

3.16 **The Conservation and Archaeological Officers** have pointed out the potential adverse effects on the Church Stretton Conservation Area, the Caer Caradoc scheduled monument and the "Battlefield" HER.

3.17 The Heritage Assessment prepared by RK Morris's in 2015 addresses these issues and states that:-

"There would be a degree of minor impact in the broader setting, mainly because of the elevated views offered from the vantage points of the hills all around Stretton. In wide views from the Long Mynd to the west it could be deemed that the proposed housing could have a minor impact on the overall setting of Caer Caradoc because there would be a slight infilling of the open land to the north of Battlefield.
From the lower slopes of the Mynd the potential impact is reduced by the rise of High Leyes and by the existing buildings of Church Stretton itself. It is only from the upper slopes that there are views of the study area in the distance. The proposals also address this issue with carefully designed tree planting which will mitigate the limited impact of the proposals on the broader setting of the hill fort".

3.18 In this Assessment, RK Morris's concluded that the provision of housing on the "Battlefield" site (CST028) would have a minor impact on the heritage

assets of the area and that the proposed structural landscaping would further reduce the impact.

3.19 In terms of the potential archaeological interest on the "Battlefield" site RK Morris's states that:-

"The HER entry accepts that the battlefield has 'no authentic history' but also notes that there was a local tradition of a skirmish in the 13th century between the English and Welsh, as well as the fact that Cwms Plantation used to be known as Battlestones. There are also anecdotes of ploughing turning up 'various fragments of broken swords and other warlike weapons' – though the dates and details are largely unrecorded. Given the strategic importance of this area for centuries, and the many conflicts between the English and Welsh, as well as between the various English baronies, it would not be surprising if there had been skirmishes in this area. The main part of the supposed battlefield is now covered by a modern housing estate built in the 1960's."

3.20 In the light of these remarks an archaeological assessment of the undeveloped part of the "Battlefield" site within CST028 will be carried out prior to the submission of a future planning application.

4.0 SUSTAINABILITY ASSESSMENT

4.1 The Stage 3 Assessment scores the sustainability of the CST028 site as "fair".

4.2 In reaching this conclusion the policy officers have referred to the wider community benefits which would accrue if the CST028 proposals are combined with the CST033 and CST034 sites and the long-standing access issues along Cwms Lane resolved.

4.3 In this regard, the concept masterplan 16004-01 Rev L attached to this Statement at Appendix 2 confirms that the proposal to upgrade, as part of the proposals to construct a new roadway to the A49, the northern part of Cwms Lane to serve the CST028 site can also provide access to the CST033 and 034 sites.

4.4 It is understood that the landowner of the CST028 site has received a verbal request from the landowners of the CST033 and 034 sites to utilise the new roadway and A49 junction to access their sites.

4.5 Directing vehicular traffic away from Cwms Lane and Watling Street North will ensure that the capacity of Watling Street North is not exceeded.

4.5 A similar request has also been made by the owner of the 14/01173/OUT site. Accessing the 14/01173/OUT site through CST028 will reduce its development costs and increase its viability.

4.6 The **social sustainability** of the CST028 proposal would be enhanced by the fact that the development would cater for the identified housing needs of all parts of the community, particularly those requiring a move-on or starter home (see Church Stretton Place Plan extract at Appendix 3) or retirement bungalow.

4.7 In this regard, 53 of the 66 dwellings proposed are 2 and 3 bed dwellings (including 7no. bungalows) as shown on the 16004-01 Rev L plan.

4.8 The need for these types of dwellings in Church Stretton has been as identified by Shropshire Council (and Church Stretton Town Council – Appendix 3) in paragraphs 8.3 and 8.9 of the Preferred Sites consultation document to address the housing needs of the growing population of over 65s and key workers who require affordable and/or low cost market/ intermediate housing.

4.9 These smaller dwellings can be provided under the new wider definitions of affordable and lower cost housing contained within paras 61 and 71 and Annex 2 of the NPPF, and proposed Policies DP1, DP2 and DP3.

4.10 The CST028 site is within walking distance of the town centre and railway station and has direct access to the footpath network which surrounds the town.

4.11 The environmental sustainability of the proposal can be enhanced by careful design and siting of the proposed dwellings in order to ensure that the adverse impact on the identified heritage assets is kept to a minimum.

4.12 The **economic sustainability** of Church Stretton as a whole will be enhanced by the investment into the area which will accrue from the construction of the dwellings and support for the services and facilities in the town by the future occupiers of the dwellings.

4.13 The history of the non-delivery of the two allocated SAMDev sites in Church Stretton – the Shrewsbury Road School Site (15/01276/FUL), 47 dwellings,

and the Leasowes Sandford Avenue Site (14/01173/OUT), 52 dwellings, and the potential difficulties in developing the CST021 site (highlighted by Church Stretton Town Council in its response to the draft LP consultation) are well known.

4.14 It is therefore imperative that Shropshire Council now proceeds to include the only truly deliverable major housing site (CST028) in Church Stretton in the Local Plan as an allocated site.

4.15 In order to provide certainty that the CST028 site will deliver the types of housing referred to in paragraphs 4.6 and 4.7, above, it is suggested that the proposed allocation in Policy S5.1 is cross referenced with Policies DP1 – DP3.

4.16 With regard to Policy DP1, it is apparent, by reference to the ONS 2018-based household projections for Shropshire, part 2 of the SHMA and paragraph 8.3 of the Preferred Sites Consultation document, that the need for older persons' housing in Shropshire (including Church Stretton) is rising rapidly.

4.17 In Church Stretton itself, the provision of smaller single storey accommodation on the CST028 site will provide the opportunity for people living in the many large 2-storey properties in the town to downsize.

4.18 It is suggested, therefore, that Policy DP1 is supplemented by reference to specific allocations on sites of less than 50 dwellings which can deliver this type of housing.

4.19 This approach is encouraged in the NPPF, para 61 and NPPG ref 63-013-20190626:-

"Allocating sites can provide greater certainty for developers and encourage the provision of sites in suitable locations. This may be appropriate where there is an identified unmet need for specialist housing".

And:-

"where there is an identified unmet need for specialist housing, local authorities should take a positive approach to schemes that propose to address this need."

4.20 It is also suggested that an additional section to Policy DP1 is included to set out the Council's policy approach to planning applications for specialist housing as follows:-

Specialist housing developments will be considered positively on sites within settlement boundaries where there is a shortage of specialist housing relative to recognised needs.

4.21 In addition to this, it is understood that it is an aspiration of Church Stretton Town Council to redress the imbalance in the age demographic in the town by supporting new housing for younger people to enable them to live and work in the town to support the local service and tourism economy, in accordance with the findings of the Draft Housing Strategy and the SHMA.

4.22 It is therefore suggested that the allocation of the CST028 site in the Local Plan could also be cross referenced to Part 1 of Policy DP1 which relates to Meeting the identified needs of local communities.

4.23 This is one of the Key Objectives of the Draft Housing Strategy:-

1. To meet the overall current and future housing needs of Shropshire's growing population by addressing the housing needs of particular groups within communities

4.24 In summary, it has been demonstrated that the CST028 site is within a sustainable settlement, is not constrained by technical issues, is viable and can be delivered quickly in conjunction with a local housing developer.

5.0 CONCLUSION

5.1 It is acknowledged that the Council's planning officers are in a difficult position finding, to quote a policy officer, a "least worst" site in Church Stretton which can provide a supply of deliverable dwellings sufficient to address the housing needs of the community, thereby complying with the requirements of the NPPF, NPPG and the Housing Delivery Test, whilst, at the same time, ensuring that the harm to the AONB is kept to a minimum.

5.2 It is contended that, of all the major sites put forward for consideration for inclusion in the LPR, the CST028 site is the "least worst" in environmental terms, suffers from the least constraints and is best in terms of sustainability and deliverability.

5.3 It can also facilitate access to the “long term potential” CST033 and 034 sites, thereby unlocking their development potential and provide a more cost-effective alternative access to the 14/01173/OUT site, thereby facilitating its delivery.

5.4 The CST028 site is in single ownership, has no known legal or physical constraints or impediments and can be delivered quickly in accordance with the requirements of the NPPF.

6.0 SUPPORTING PLANS & REPORTS

6.1 The technical reports and assessments which support the development of the CST028 site can be found on Shropshire Council’s planning web page under application number 14/04374/OUT.

6.2 If the Council resolves to allocate the CST028 site for residential development in the LPR, these reports and assessments will be updated to accompany a formal planning submission.

6.3 Appendix 1 Landscaping Plan

6.4 Appendix 2 Concept masterplan 16004-01 Rev L

6.5 Appendix 3 Extract from the Church Stretton Place Plan

Shropshire Council: Shropshire Local Plan

Representation Form

*Please complete a separate **Part B Representation Form** (this part) for each representation that you would like to make. One **Part A Representation Form** must be enclosed with your **Part B Representation Form(s).***

*We have also published a separate **Guidance Note** to explain the terms used and to assist in making effective representations.*

Part B: Representation

Name and Organisation:	Les Stephan Planning ltd

Q1. To which document does this representation relate?

☑ Regulation 19: Pre-Submission Draft of the Shropshire Local Plan

☐ Sustainability Appraisal of the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan

☐ Habitats Regulations Assessment of the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan

(Please tick one box)

Q2. To which part of the document does this representation relate?

Paragraph:		Policy:	S16.2	Site:	Condover	Policies Map:	

Q3. Do you consider the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan is:

	Yes:	No:
A. Legally compliant	☐	☐
B. Sound	☐	☑
C. Compliant with the Duty to Co-operate	☐	☐

(Please tick as appropriate).

Q4. Please give details of why you consider the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.

If you wish to support the legal compliance or soundness of the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan or its compliance with the duty to co-operate, please also use this box to set out your comments.

The Shrewsbury Place plan area disregards the significance of the settlement of Condover which is a major settlement close to Shrewsbury on the southern side and should be a community Hub delivering substantial housing development. The proposal to rely soley on the Neighbourhood Plan to possibly bring any form of housing forward renders the Plan unsound ans is an abdication of the Councils duties a LPA.

(Please continue on a separate sheet if necessary)

Q5. Please set out the modification(s) you consider necessary to make the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan legally compliant and sound, in respect of any legal compliance or soundness matters you have identified at Q4 above.

Please note that non-compliance with the duty to co-operate is incapable of modification at examination. You will need to say why each modification will make the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

The regulation 18 representations in relation to this site are attached and this representation submits that the settlement should be designated a Community Hub and this site should be added to make the Plan sound.

(Please continue on a separate sheet if necessary)

Please note: *In your representation you should provide succinctly all the evidence and supporting information necessary to support your representation and your suggested modification(s). You should not assume that you will have a further opportunity to make submissions.*

After this stage, further submissions may only be made if invited by the Inspector, based on the matters and issues he or she identifies for examination.

Q6. If your representation is seeking a modification to the Regulation 19: Pre-Submission Draft of the Shropshire Local Plan, do you consider it necessary to participate in examination hearing session(s)?

Please note that while this will provide an initial indication of your wish to participate in hearing session(s), you may be asked at a later point to confirm your request to participate.

☐ No, I do not wish to participate in hearing session(s)

☑ Yes, I wish to participate in hearing session(s)

(Please tick one box)

Q7. If you wish to participate in the hearing session(s), please outline why you consider this to be necessary:

To properly advocate the inclusion of the settlement and this site for housing to make the plan sound.

(Please continue on a separate sheet if necessary)

Please note: *The Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate in hearing session(s). You may be asked to confirm your wish to participate when the Inspector has identified the matters and issues for examination.*

Signature:	S A Taylor	Date:	24/02/2021

Office Use Only	Part A Reference:
	Part B Reference:

PRE- SUBMISSION DRAFT OF THE SHROPSHIRE LOCAL PLAN 2016 TO 2038

REGUALTION 19 CONSULTATION REPRESENTATIONS

RELATING TO: -

COMMUNITY HUBS- CONDOVER

SITE ADDRESS:

LAND AT STATION ROAD CONDOVER

PROJECT DETAILS

Prepared by:
RCM
LPR Review
Date:20/02/2021
Job No:
Client Name:
Morris Properties Ltd -

1.0 THE LANDOWNER

The Landowner, Morris Property are a long-established local Shropshire housebuilding and property development company that has a reliable record for delivery.

2.0 SITE LOCATION

The proposed site put forward in this representation is located alongside and fronts to Station Drive, Condover. It is part of a larger area of land that was previously put forward in the SAMDev Plan review and has been in the ownership of the company for many years. The site indicated is significantly reduced in area from previously put forward in the SAMdev review

3.0 THE PROPOSED SHREWSBURY HUBS

The basis of this representation is that the Plan Review is unsound insofar as it relies on a potential Neighbourhood Plan to provide the sole allocation of housing in this settlement if any. Failing to provide any housing allocations in the Principal Development Plan is an abdication of the responsibility to ensure the provision of housing land and the delivery of housing. It is not sound to rely on the Neighbourhood Plan, if one is delivered to ensure that this duty is met. The NP should be supportive of the Development Plan and does not replace it. Clearly this settlement is recognized as a sustainable housing settlement.

Policy 16.2 put forward in the Plan Review omits to include this significant settlement from the list of proposed Community Hubs in the Shrewsbury Place Plan. Condover is a significant settlement in the rural area south of Shrewsbury and this proximity makes it more important that it should deliver a mix of housing based on identified land allocations in the Local Plan. We disagree with this omission. In our view it is not correct to rely on a Neighbourhood Plan given the clear housing need for the types of housing identified in the HNA.

Neighbourhood plans are intended to add to the Local Plan where communities consider that insufficient allocations for housing need have been made in the

Development Plan. Relying on Neighbourhood plans results in under allocation, slower and less certain delivery, as is demonstrated so clearly in Herefordshire.

Allocating land which is brought forward by landowners and particularly by developer owned land ensures that land is put forward where it will actually be developed particularly where this allocation is submitted and supported by a housing developer.

At the same time the National Planning Policy Guidance encourages specific allocations stating : -

Allocating sites can provide greater certainty for developers and encourage the provision of sites in suitable locations. This may be appropriate where there is an identified unmet need for specialist housing (NPPG ref IC 6-013 -2019062)

PROPOSED SITE

The proposed site is closely related to the existing settlement pattern and forms a logical addition. A range and mix of house types and sizes is indicated. The range on the plan and the mix can be determined by the Council to meet the needs of specific groups such as self-build or custom build as well as one bed and two bed units and specialist accommodation for the elderly.

We urge the council to review policy 16.2 and include Condover as a Hub settlement and our clients land to be allocated to deliver the range and mix of housing need that has been identified.

DELIVERABILTY

Having the benefit of a major player with the resources to develop land ensures its deliverability unlike much of the land that is put forward on a speculative basis.

INDICATIVE SITE DEVELOPMENT

The potential site capacity and broad layout plan submitted with this representation demonstrates the suitability of this site for a mix of housing and will assist deliverability which has been a difficulty in the rural areas in the last plan period.

HOUSING DEVELOPMENT

It is our view that this site should be included for a housing allocation to address the shortfall in delivery since the SAMDev was adopted and meet the growing need for different types of housing identified in the NPPF and the draft Local Plan (Policies DP1 – DP7).

CONCLUSIONS

The site is closely related both in visual and physical terms to existing development and it would be a logical addition to the settlement of Condover.

The proposed development is of a scale and siting which is sympathetic to the village.

The proposal will ensure the provision of allocated land to meet the identified needs.

It will provide a mix and range of housing at an early stage in a serviced manner by the landowner which are currently not met in the south of the County.
The proposal will assist this rural community in maintaining and promoting its sustainability by helping to sustain services and provide a wider range of housing.

There is good access and public transport serving the immediate area.

The settlement of Condover relates well to nearby main settlements in the Authorities area and therefore mutually supports those settlements and services in a sustainable way.

The development meets the aims and objectives of the NPPF in seeking to promote healthy and sustainable rural communities and adopts a positive approach towards promoting a strong rural economy.

There are no significant adverse or unacceptable impacts that outweigh the benefits of allocating this site for development and accordingly the land should be included within the proposed Community Hubs for Shrewsbury.

Supporting Reports

1 Indicative site layout

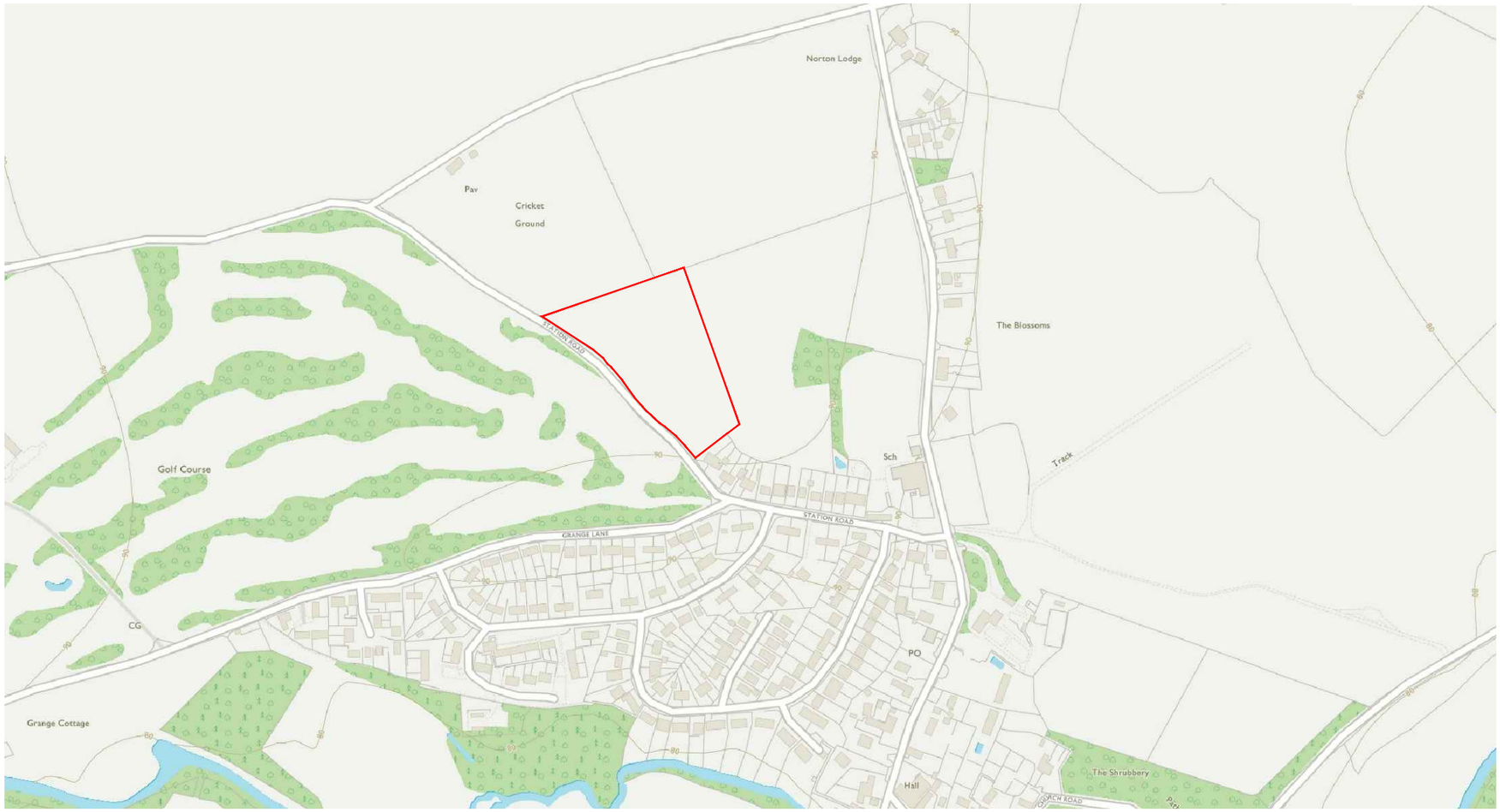
Robert Mills-Pereira MRTPI

20/02/2021

N

LEGEND

Site Boundary



Rev.	Description	Date	Initial

Les Stephan Planning Ltd.
Chartered Town Planners & Development Consultants
9 Sweetlake Business Village
Shrewsbury SY3 9EW
01743 231040
www.LSPLtd.co.uk

Client:

Morris Property

Site Location:

Land East of Station Road
Condover
Shropshire

Drawing Title

Site Plan

Drawn by:	Date:		
SJS	October 2020		
Scale	**Job No.**	**Dwg No**	**Rev.**
1/5000 @ A3	0016	01	-

CONDOVER VILLAGE EXTENSION - MORRIS PROPERTY
SCALE 1:500 @ A1 19008-007 Sept 20
PROPOSED SITE LAYOUT
etc DESIGN LTD. ARCHITECTS

Schedule (West Housing)
(18%) 6 x 1B Apartments (2 storey)
(38%) 11 x 2B Houses / Bungalows
(44%) 13 x 3B Houses / Bungalows with attic trusses for 3rd bed

30 dwellings total
(excluding self / custom build)

KEY:
- 1 Bed
- 2 Bed
- 3 Bed
- Self / Custom Build

6 Self / Custom build serviced plots
2 Road access points
Archeological zone
Private driveway
Station Road
Shrewsbury Golf Club
adjacent scheme under planning approval 18/04797/FUL
Condover CE Primary School