W14209 **January 2015**

EAST GRINSTEAD AND SURROUNDS

NOVEMBER 2014 SURVEY AND REVIEW OF TRAFFIC CONDITIONS

DETAILED AND CONSOLIDATED INFORMATION AND FINDINGS

JANUARY 2015

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1.0 INTRODUCTION

1.1 Jubb has been commissioned to carry out a transport study to establish the operational efficiency of the local highway network in East Grinstead and thus gauge the capacity of the prevailing transport infrastructure along with proposed highway enhancements to accommodate any further developments in the area.

BACKGROUND

1.2 East Grinstead is located on the north-eastern fringe of Mid Sussex District Council (MSDC) in West Sussex close to the East Sussex, Surrey, and Kent borders. It lies 27 miles south of London, 21 miles north of Brighton, and 38 miles northeast of the county town of Chichester. The market town covers an area of 2,443.45 hectares and had a recorded population of 23,942 persons in the 2011 census. Nearby towns include Crawley and Horley to the west, Tunbridge Wells to the east and Redhill and Reigate to the northwest.

1.3 The highway network of East Grinstead is knitted together by three interurban routes of the A22, B2110 and the A264 which form an important part of the strategic highway network within Mid Sussex. This provides East Grinstead with gateway links to Gatwick, Crawley and Horley to the west, Croydon and Redhill to the north and Tunbridge Wells to the east.

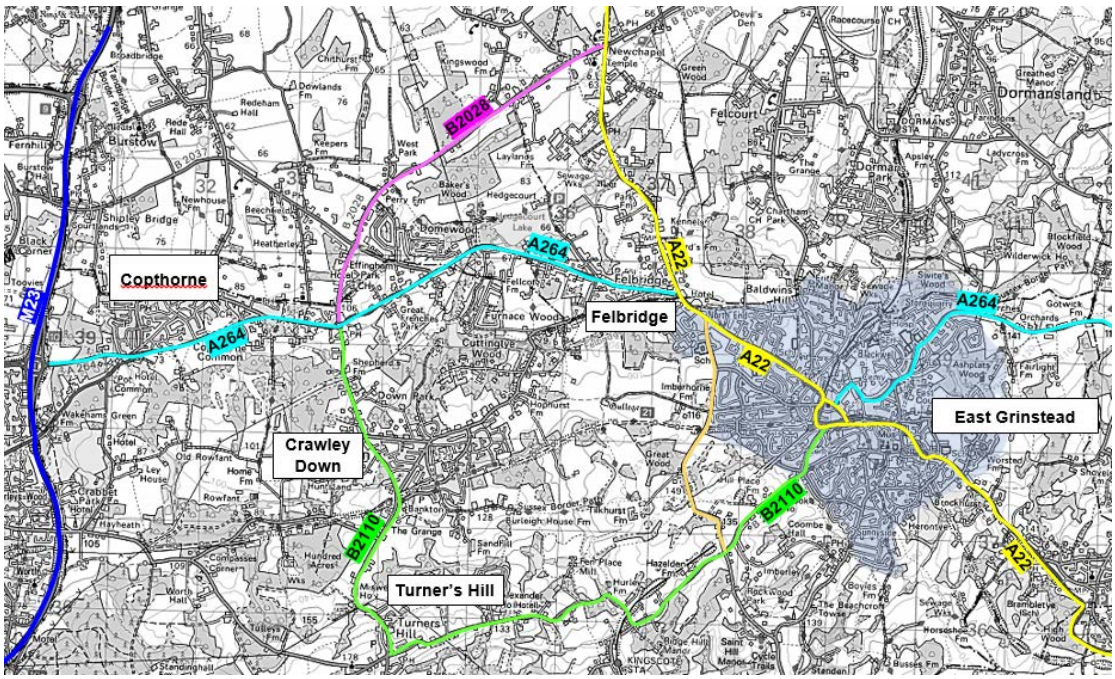


Figure 1.1 Location of East Grinstead

1.4 It is understood from previous reports that the existing highway network has failed to cope with the prevailing traffic demand with severe delays and congestion experienced along the A22 corridor throughout the day.

1.5 In view of this, to deliver practical and effective highway solutions and subsequently establish a quantum of development that can be accommodated within an improved highway network, a series of transport studies as set out in figure 1.1 below were carried out into strategic development in East Grinstead, these have subsequently informed the emerging MSDC Local Plan and East Grinstead Neighbourhood Plan.

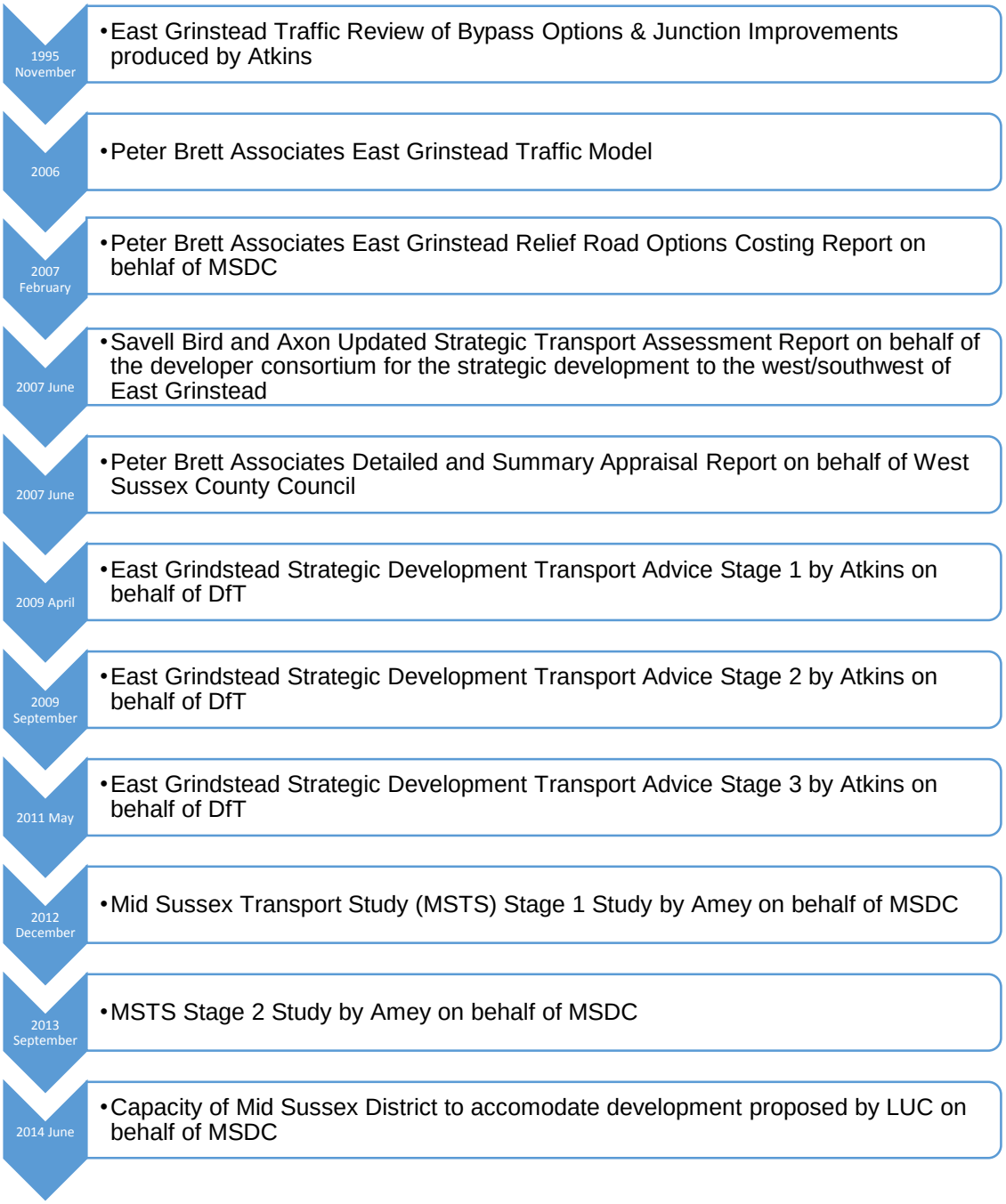


Figure 1.1 Previous East Grinstead Transport Studies

1.6 The purpose of this study is to review the previous transport studies and compare the conclusions with up to date 2014 traffic information taking into account recent changes in housing provision in East Grinstead and thus establish an updated baseline which can be used in determining the level of future development that can be sustainably delivered in the area.

REPORT STRUCTURE

1.7 The structure of this report is as follows:

- **Section 2** – Summarises the previous background transport studies undertaken for the Mid Sussex District Local Plan and East Grinstead Neighbourhood Plan.
- **Section 3** – Documents permitted or planned residential developments within East Grinstead.
- **Section 4** – Examines the November 2014 traffic demand and network performance in comparison with the outcome of previous transport studies and thus gauge the subsequent development capacity.
- **Section 5** – Assesses the impact of the committed development on the highway network.
- **Section 6** – Present a summary of the study and draws conclusions including recommendations on the way forward based on the outcome of this study.

2.0 PREVIOUS TRANSPORT STUDIES

2.1 The main transport studies undertaken in the East Grinstead area have been reviewed and their approach and outcomes reviewed and summarised below.

Peter Brett Associates Modelling Reports

2.2 PBA were commissioned by West Sussex County Council (acting on behalf of Mid Sussex District Council) to establish a multi-modal model of the transport infrastructure in East Grinstead. A Local Model Validation Report was subsequently produced to explain and validate the modelling.

2.3 The model is calibrated against a 2006 base and used to assess transport conditions in the morning (AM) and evening (PM) peak hours in 2021. Thirteen options were tested, ranging from a 'do minimum' scenario (traffic growth and committed highways improvements but no development or wider junction improvement strategy), through to full development scenarios (2,500 houses, full relief road, junction improvement strategy etc). A reduced strategic development of 1,500 homes with a partial relief road or no relief road was also considered.

2.4 PBA's modelling demonstrated that:

- There will be a major deterioration in traffic conditions in East Grinstead by 2021 if no improvements are made to the highway network;
- Significant highway enhancements will be required along the A22 corridor and other junctions in East Grinstead to reduce delays in the town;
- The reduced or full levels of strategic development can only be delivered if the provision of a full relief road in place; and
- Providing a reduced level of development and only part of the relief road does not provide as much spare capacity to the town as providing the full relief road with the full level of strategic development.

Savell Bird and Axon Updated Strategic Transport Assessment Report (STAR) – June 2007

2.5 Savell Bird and Axon were commissioned by the developer consortium for a strategic development to the west / south west of East Grinstead (Taylor Woodrow, David Wilson Homes, Linden Homes and Persimmon Homes).

2.6 The STAR was originally produced in April 2006 to interpret PBA modelling results at a strategic level as a background technical document to the Area Action Plan (AAP). The STAR was updated in June 2007, reporting on work undertaken to further assess the transportation implications of strategic development to the west of East Grinstead.

2.7 Results of the testing undertaken using the PBA Transport Model were assessed on a strategic level to compare the impact on traffic flows predicted at key locations. A comprehensive package of transport schemes was subsequently proposed including public transport improvement, improved facilities for pedestrians and cyclists, junction improvements, a relief road and traffic management measures.

2.8 Two options for the strategic development at East Grinstead were recommended to MSDC for further consideration in the wider context of environmental, economic and other issues.

- A strategic development of 2,500 units with an associated transport package of new bus services and junction improvements, a full relief road, improvements for pedestrians and cyclists and traffic management.
- A strategic development of 1,500 units with an associated transport package of new bus services, junction improvements, improvements for pedestrians and cyclists and traffic management.

2.9 The STAR report recommended that improvements to facilities for walking and cycling and traffic management measures to ensure that traffic uses the appropriate roads, should also form key elements of the package of measures associated with both of these options.

East Grinstead Strategic Development Transport Advice Stage 1, 2 & 3 Studies (Atkins)

2.10 East Grinstead Strategic Development Transport Advice ***Stage 1*** Study was compiled by Atkins on behalf of the Department for Transport to examine transport issues relating to the delivery of the Structure Plan Allocation (2500 dwellings at Imberhorne Farm) and thus to ascertain the level of development that could have been delivered without a relief road based on the identified capacity constraints of the A22 Corridors. It concluded that the maximum scale of development that could be accommodated on the network from the Structure Plan Allocation would be 571 dwellings and 341 jobs.

2.11 The ***Stage 2*** Study was subsequently carried out in September 2009 to inform the decision on the development allocations within MSDCs emerging Core Strategy that replaced the Structure Plan upon its adoption. The study recommended that detailed investigation on the capacity of the A22 corridor should be carried out to project a more accurate indication of spare capacity and refine the network enhancements.

2.12 Following the abandonment of the MSDC first draft Core Strategy, the ***Stage 3*** Transport Study was conducted by Atkins to deliver a specific network solution along the A22 Corridor and thus quantify an appropriate scale of development that can be achieved as a result of the highway capacity improvements. In 2011 traffic counts and journey time surveys were carried out to inform and calibrate the necessary traffic modelling.

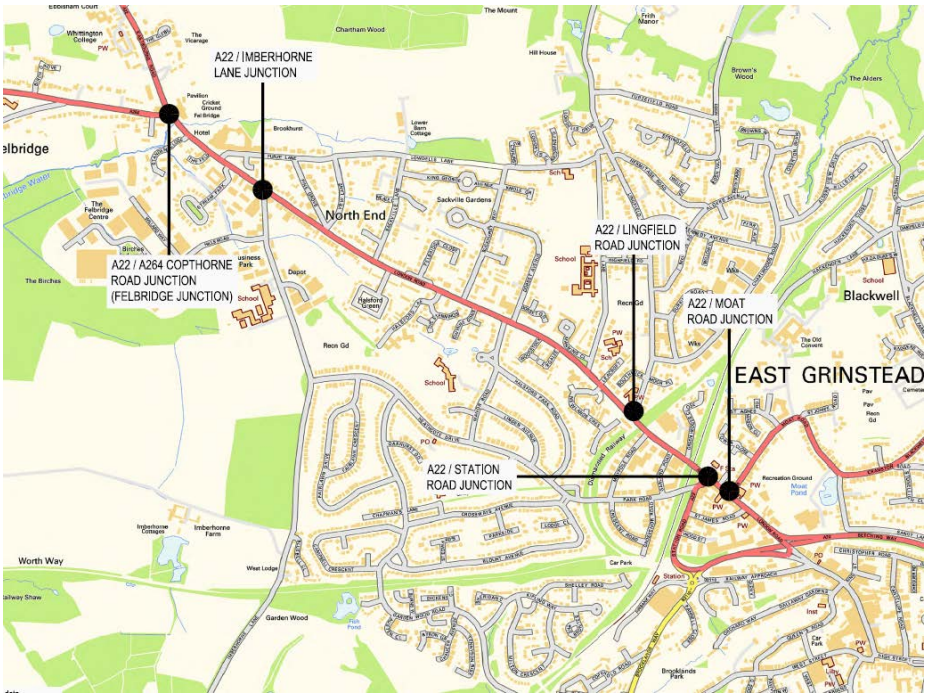


Figure 2.1 Atkins Stage 3 Study - the A22 Corridors

2.13 As part of the **Stage 3** study, committed new developments consisting of 765 dwellings were considered for a design Year 2021 Do Nothing Scenario. The location of these dwellings within East Grinstead is set out in Figure 2.2 below.

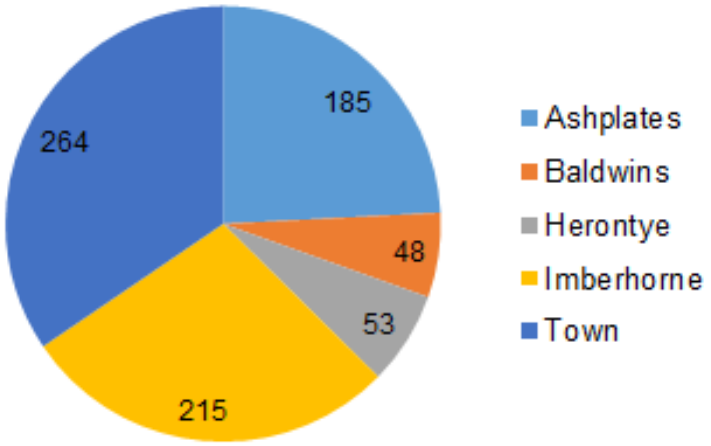


Figure 2.2 Atkins Stage 3 Study - Committed Development (SHLAA Sites)

2.14 The testing scenarios were as follows, the proposed improvements are summarised in table 2.1 below.

- Do Nothing: Future Baseline - planned improvements at Imberhorne Lane/A22 Junction as part of the nearby Bridge Park Site for Non-food Retail Use;
- Do Minimum: Network Optimisation – Do nothing network with signal pedestrian crossings at A22/Lingfield Road Junction and highway improvements that do not go beyond the existing highway boundary (£900,000);
- Do Something: Capacity Enhancements – Do minimum network with road widening and a series of capacity enhancements that require third party land (£2,250,000 excluding land).

Junction	Do Nothing Future Baseline	Do Minimum Network Optimisation	Do Something Capacity Enhancement
Felbridge Junction	• As per existing	• Signal optimisation • Widen pedestrian islands to 1.5m • Implement two lanes on A22 southbound exit from the junction	• Signal optimisation • Widen pedestrian islands to 2m • Widen A22 carriageway to the east to permit implementation of two lanes on southbound exit from the junction • Widen A22 carriageway to the west to allow extension of two lane northbound approach on A22
A22 London Road / Imberhorne Lane	• Improvements tied to development of the Bridge Park site for non-food retail use	• Signal optimisation	• Signal optimisation • Widen A22 carriageway to the east through the junction to create an additional southbound traffic lane
A22 London Road/Lingfield Road	• As per existing	• Proposed WSCC signalisation as per Drawing No. 13823, without advanced stop lines • Proposed dimensions match the proposed WSCC scheme	• Proposed signalisation • Widen A22 carriageway to the east to provide a two lane southbound approach (as per WSCC scheme) • Provide two lanes on the Lingfield Road approach (as per the WSCC scheme) • Widen A22 carriageway on both sides over the bridge over the dismantled railway to provide three lanes • Implement cantilevered footways (or on free standing structures) on both sides of the bridge
A22 London Road/A22 Station Road	• As per existing	• As per existing	• Proposed signalisation • Widen A22 to the east on the southbound approach to provide two lanes • Implement controlled pedestrian crossing facilities
A22 London Road/A264 Moat Road	• As per existing	• As per existing	• Carriageway widening on A22 to provide left turn flare • Implement controlled pedestrian crossing facilities across Moat Road

Table 2.1 Atkins Stage 3 – Testing Scenarios

2.15 In order to assess the operational efficiency of the A22 corridors and at the identified key junctions, traffic modelling was undertaken in the form of both macro and micro-simulation:

Single Junction Capacity Tests:

- Felbridge Signalised Junction (LINSIG)
- A22 London Road/Imberhorne Signalised Lanes(LINSIG)
- A22 London Road/Lingfield Road Roundabout (ARCADY)
- A22 London Road /Moat Road Priority T-junction (PICADY)

Network Micro Simulation – VISSIM Model

- A22 London Road/Lingfield Road Roundabout

- A22 London Road/Maypole Road Priority T-junction
- A22 London Road/Garland Road Priority T-junction
- A22 London Road/Station Road Priority T-junction
- A22 London Road/Park Road Priority T-junction
- A22 London Road/Moat Road Priority T-junction

2.16 The established VISSIM Model was used to assess the associated journey times along the routes identified in figures 2.3 and 2.4 below:

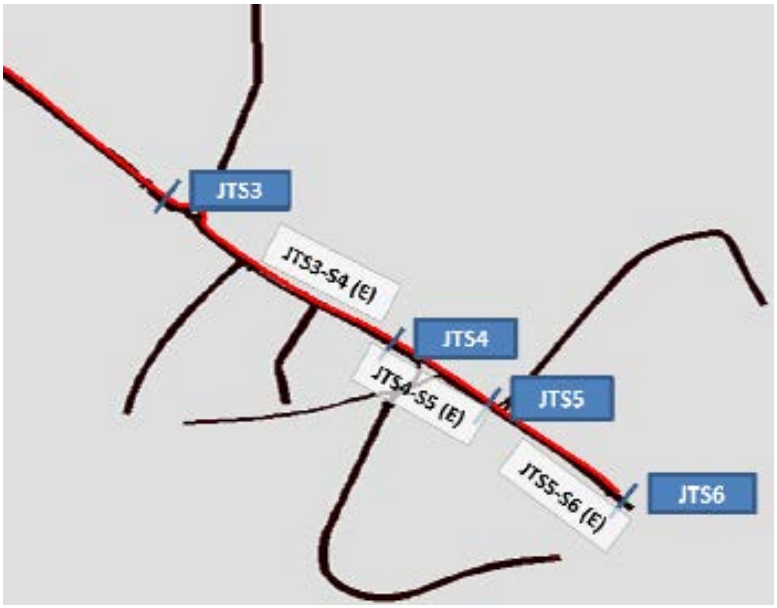


Figure 2.3 - VISSIM Model Vehicle Route 1

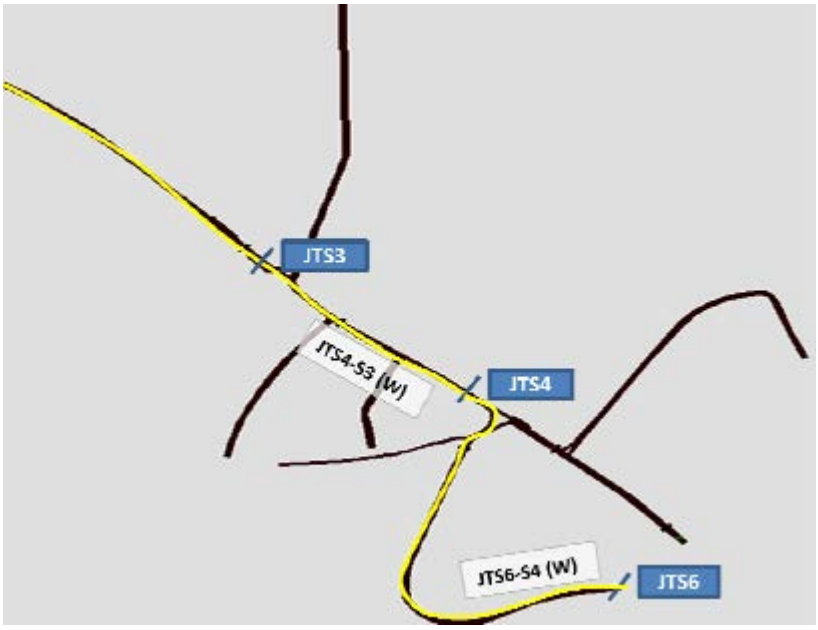


Figure 2.4 - VISSIM Model Vehicle Route 2

2.17 The study demonstrated that:

- The level of committed development in the area at 765 dwellings should be considered as a maximum threshold for the design year 2021. The proposed junction improvements (Do Minimum) will only facilitate the spare capacity to accommodate the level of committed development with the overall delay remaining at the Year 2011 level.
- Further remedial enhancements in the form of road widening (as proposed in Do Something £2,250,000 Scheme) will only offer some degree of network performance improvements with reduced queue lengths observed at most of the junctions along the A22 corridor for a design year 2021 with committed development.
- However severe congestion is still expected at the A22/Imberhorne Lane junction with a maximum queue length of 28 vehicles predicted during the PM peak on the A22 London Road southern approach.
- Despite severe delay at the A22/Imberhorne Lane Junction still being present, the development enablement assessment for an additional 190 dwellings (Do Something Sensitivity Test) shows that these can be accommodate within the rest of the study network with junctions running at or in excess of its practical capacity but within its theoretical capacity. This assumes no background traffic growth.

2.18 In view of this, the Stage 3 study concluded that development enablement is between 765 dwellings if junction improvements are limited to the Do Minimum scenario and 955 dwellings if the full transport enhancements scheme can be delivered as proposed in the Do Something scenario. To limit the development impact along the A22 Corridor, the study recommended that the realisation of housing provision should be where there is more reserved network capacity to the north east of the town.

2.19 Nevertheless, the study also highlighted that as rural rat-running was evident at the time of the survey to avoid the A22 Corridor, there is a risk that any additional spare capacity offered in these solutions could be occupied by this rather than development associated traffic. In view of this, any decision on further development enabling schemes in the area should be treated with great caution.

2.20 The results of the Atkins Stage 1, 2 and 3 Transport Studies were summarised and presented to East Grinstead Town Council within the "Transport and New Development in East Grinstead" report dated April 2012.

Mid Sussex Transport Study Stage 1 and 2 Studies by Amey

2.21 Amey was commissioned by MSDC to undertake the Mid Sussex Transport Study (MSTS) with the aim to understand the feasibility of delivering these scenarios, in the context of the capacity of the existing transport network and the potential to resolve any access problems by introducing remedial interventions.

2.22 The ***Stage 1*** Study was published in May 2012. The report was based upon the refined West Sussex County Transport Model to evaluate the transport impact associated with committed, strategic and neighbourhood development identified within the Consultation Draft District Local Plan (October 2011) at forecast year 2021 and 2031.

2.23 The study concluded that travel demand associated with the proposed strategic development allocations proposed in the draft District Local Plan will have a detrimental impact upon the operational efficiency of the existing highway network at a number of critical locations including the A462/B2028 Dukes Head Junction and the B2110/B2028 Turners' Hill junction with an RFC value in excess of 95% predicted at both locations.

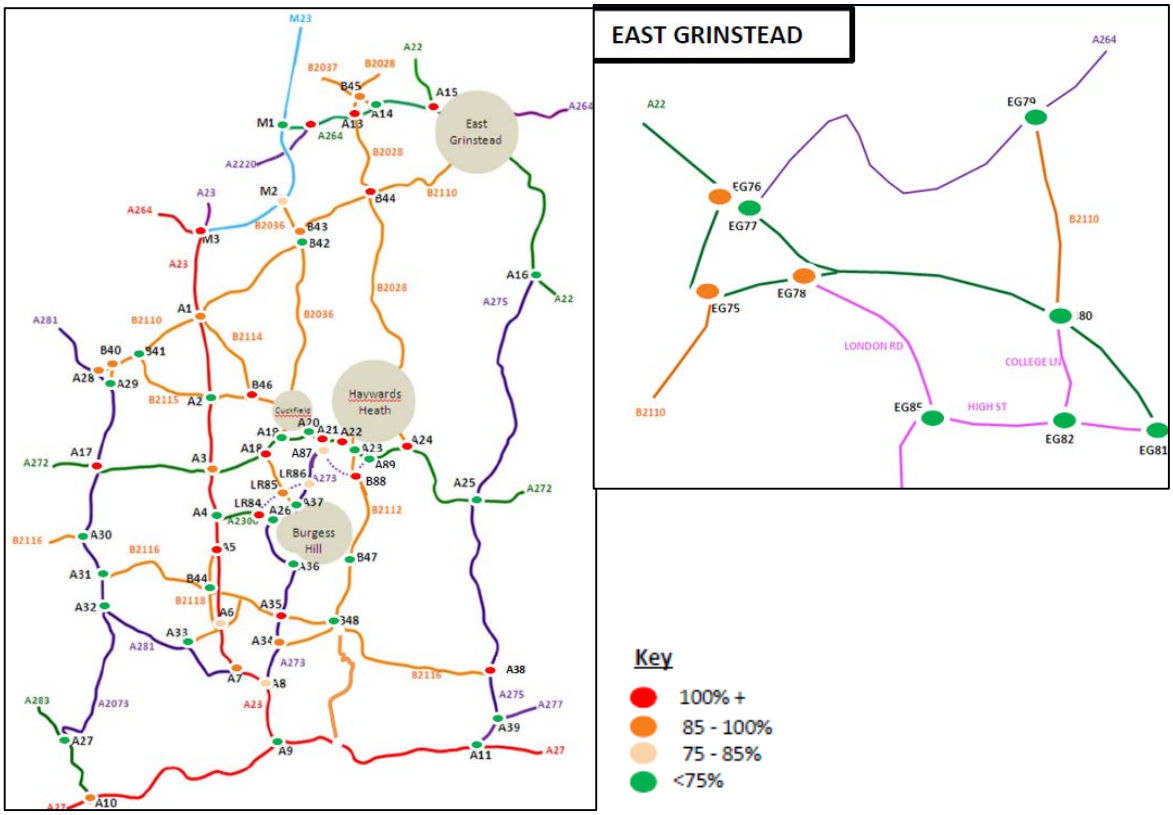


Figure 2. 5 Stage 1 Study – Year 2031 AM Peak with Local Plan Developments Forcast Capacity

2.24 In view of this, to deliver a package of remedial highway interventions and impact mitigation scheme to accommodate the identified development allocation, a **Stage 2** Study was subsequently published in September 2013. The report built on the outcomes of the **Stage 1** Study with the transport modelling updated to reflect the development proposed in the May 2013 submission of Mid Sussex District Plan including the development as set out in Table 2.2 below.

Location/Description	Dwellings		Jobs	
	2021	2031	2021	2031
Committed Developments				
Rural (Mid Sussex)	150	150	375	375
Burgess Hill (Main)	1326	2145	15	15
Haywards Heath	1353	1378	562	562
East Grinstead (Main)	618	643	92	92
Hurstpierpoint/Keymer	120	120	0	0
Crawley Down	103	103	118	118
Copthorne	3	3	0	0
Cuckfield	70	70	0	0
Crawley (Main)	2700	2700	180	180
Rural (Horsham)	2100	2650	698	721
Neighbourhood Plan Developments				
Rural (Mid Sussex)	209	417	305	610
Burgess Hill (Main)	251	502	367	734
Haywards Heath	475	950	695	1389
East Grinstead (Main)	103	206	151	301
Hurstpierpoint/Keymer	100	200	146	292
Crawley Down	0	0	0	0
Copthorne	250	500	366	731
Cuckfield	15	30	22	44
Strategic Developments				
Northern Arc	1693	3385	0	0
East of Kingsway	0	0	0	0
A2300 Business Park	0	0	1751	3502

Table 2.2 Considered Development Allocation in MSTS

2.25 Capacity enhancements, proposed as part of the Atkins Stage 3 report, were also considered as part of the network solutions and included in "Development Primary and Secondary (P&S) Intervention Case" that were incorporated within the MSTS for design year 2031.

2.26 The study indicates that with accompanying highway enhancements, the District Plan would not result in any congestion issues along the A22 corridor within East Grinstead. However, congestion could potentially be experienced along the A264 westbound

from the B2028 to M23 but could be resolved by introducing a wide single 2-lane carriageway within the existing highway boundary.

2.27 In light of this, the **Stage 2** study concludes that the MSDC District Plan could be successfully delivered at AM Peak 2031 in transport impact terms, provided that recommended remedial interventions are introduced to mitigate localised highway congestion.

2.28 It is understood that the Mid Sussex District Plan was withdrawn in May 2014 following the first Hearing Session in November 2013 and the Council now is preparing a revised District Plan.

Capacity of Mid Sussex District to accommodate development

2.29 In March 2014, Mid Sussex District Council commissioned LUC to carry out a study to examine the Capacity of the District to accommodate development in terms of:

- Environment;
- Infrastructure;
- Landscape Capacity; and
- Sustainability.

2.30 The study is to inform the emerging District Plan and forms part of the evidence base in determining the level of development that can be satisfactorily and sustainably accommodated within the district. Based upon the outcomes of the Mid Sussex Transport Studies and East Grinstead Development Transport Advice, the LUC report identified the following as key issues for Transport Infrastructure:

- Lack of direct railway line between Haywards Heath and East Grinstead in the centre of the District
- Traffic congestion in certain parts of the District could be aggravated by additional development. However developments that were identified within the Submission District Plan could be accommodated providing certain transport schemes are implemented.

3.0 COMMITTED DEVELOPMENT TRAFFIC NOT YET IMPACTING ON THE HIGHWAY NETWORK

3.1 In order to understand any changes in land-usage in/around East Grinstead that will lead to additional traffic on the highway network, a list of permitted residential developments within the East Grinstead wards was obtained from the MSDC Commitment Schedule of 1st September 2014. The full commitments schedule is included at **Appendix 1**.

3.2 This schedule as set out at Figure 3.1 below shows that there are an additional 532 dwellings within East Grinstead that are committed but have yet to be built/occupied.

Town / Parish	Ward	Site Address	Overall Total (Gross)	Overall Losses (Gross)	Overall Cmpltns (Net)	Total Re-maining (Net)	PP Ref #	PP Lapse Date	SHLAA ID #
East Grinstead	Imberhome Ward	West of Imberhome Lane, East Grinstead	100	0	23	77	10/02071/OUT	Commenced	235
East Grinstead	Imberhome Ward	Car Park, Felbridge Hotel, London Road, East Grinstead	12	0	0	12	11/03649/FUL	Commenced	475
East Grinstead	Imberhome Ward	218 London Road, East Grinstead	14	0	0	14	12/04326/FUL	10/10/2016	259
East Grinstead	Imberhome Ward	17 Copthorne Road, Felbridge, East Grinstead	26	1	0	25	12/01796/FUL	20/12/2016	548
East Grinstead	Imberhome Ward	Garland Court, Garland Road, East Grinstead	24	0	0	24	13/04309/PDOFF	30/05/2016	697
East Grinstead	North Ward	Stonequarry Woods, East Grinstead	40	0	0	40	Allocated		96
East Grinstead	North Ward	South of The Old Convent & St Margret's Convent	74	0	0	74	14/00294/FUL	25/06/2015	97+98
East Grinstead	North Ward	Rear of 240-258 and adj Ashplats House, Holtye Road	141	1	51	89	12/00716/REM	Commenced	52
East Grinstead	South Ward	Tennis & Squash Club Ship Street East Grinstead	0	0	0	0	Allocated	Unlikely	101
East Grinstead	South Ward	Dunnings Mill Snooker Club, Dunnings Rd, East Grinstead	7	0	2	5	11/03093/FUL	Commenced	316
East Grinstead	Town Ward	33-35 Cantelupe Road, East Grinstead, RH19	14	0	0	14	11/02527/FUL	08/12/2014	608
East Grinstead	Town Ward	65 London Road, East Grinstead	7	0	0	7	13/02120/FUL	Commenced	638
East Grinstead	Town Ward	1-25 Bell Hammer, East Grinstead	28	25	0	3	13/01343/FUL	15/10/2016	696
East Grinstead	Town Ward	Sussex House, London Road, East Grinstead	8	0	0	8	13/04040/FUL	27/01/2017	409
East Grinstead	Town Ward	St James House, 150 London Road, East Grinstead	27	0	0	27	13/00636/PDOFF	30/05/2017	577
East Grinstead	Town Ward	3rd Floor, St James House, 150 London Rd, East Grinstead	6	0	0	6	14/01370/FUL	10/06/2017	577
East Grinstead	Town Ward	Greenstede House, Wood Street, East Grinstead	13	0	0	13	13/03298/PDOFF	30/05/2016	123
East Grinstead	Town Ward	Phoenix House, 23-25 Cantelupe Road, East Grinstead	24	0	0	24	13/04062/PDOFF	30/02/2016	259
East Grinstead	West Ward	Junction of Windmill Lane/London Rd, East Grinstead	40	0	0	35	Allocated		102
East Grinstead	Ashplats	St Lukes House Vicarage, Holtye Road, East Grinstead	14	0	0	14	12/00439/FUL	08/07/2016	439
East Grinstead		The Vinesong Trust, Warrenside, College Lane, EG	14	0	0	14	12/01877/OUT	14/05/2017	444
East Grinstead		67-69 London Road, East Grinstead	7	0	0	7	14/00572/FUL	14/05/2017	705
Total						532			

Figure 3.1 East Grinstead Housing Commitments at 1 September 2014

- **Major Developments outside East Grinstead**

3.3 An outline planning permission was recently granted for a 500 dwelling development at Copthorne Village to the west of the M23 Junction 10. The development layout is included at Figure 3.2.

Figure 3.2 Copthorne Village Development

3.4 The Transport Assessment submitted in support of this outline application indicated that 69 two way vehicle movements would travel to/from the direction of East Grinstead along the A264 Copthorne Road via Turners Hill Roundabout during the weekday AM peak whereas 25 vehicles is predicted for PM Peak. This is set out in Figure 3.3 below.

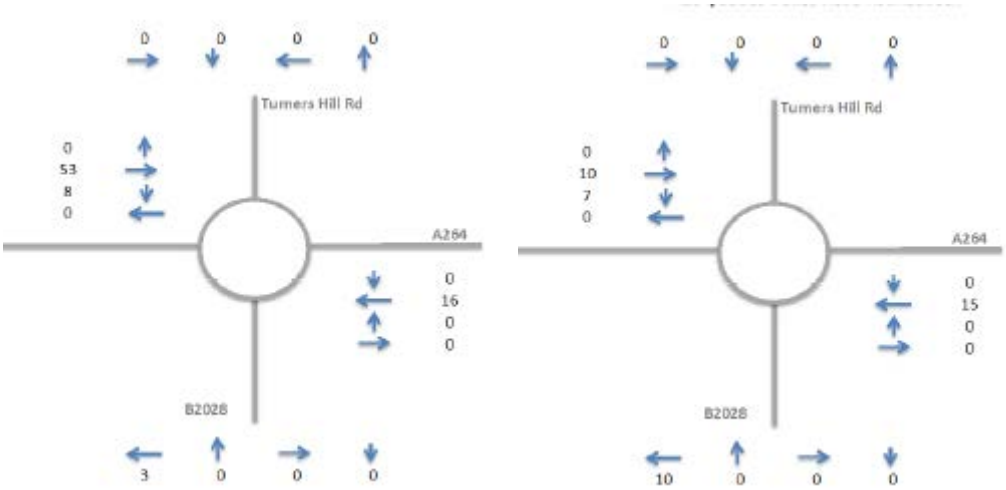


Figure 3.3 Copthorne Village Development Traffic at A264 / B2028 Turners Hill Roundabout

3.5 Based upon the vehicle trip rates adopted within Atkins **Stage 3** Study for AM Peak, this will be the equivalent a traffic generation arising from approximately 120 housing units located to the west of East Grinstead and thus should be included as part of this study.

3.6 As of 1st April 2014 approximately 209 dwellings have also been approved within the neighbouring ward of Crawley Down Ward that have yet to be built/occupied. While these developments are located outside the boundary of the Parish Town, they will have an impact along the A264, the A22 and the B2028 corridors to/from East Grinstead.

4.0 TRAFFIC CONDITIONS AT NOVEMBER 2014

4.1 In order to understand the current operational efficiency of the proposed study network and thus to provide a like for like comparison with the Atkin Stage 3 Study, a comprehensive package of traffic surveys was conducted. The full traffic count data is included at **Appendix 2** with the locations of the junctions shown on a plan at **Appendix 3**. The scope of the surveys was as follows:

- **Manual Traffic Count and Queue Length Surveys** were collected from 07:00 to 10:00 in the morning and between 15:00 and 19:00 in the afternoon peak on 4th - 5th November at the following junctions:
  - The B2110/the B2028 Turner's Hill Junction; and
  - The A264/the B2028 Roundabout.

- **Journey Time Surveys** were also conducted on 4th and 5th of November during both AM (07:00–10:00) and PM (15:00-19:00) peak periods along the A22 corridor between its junction with Lingfield Road, Station Road and Moat Road. Two survey routes were identified as follows, consistent with Atkins' **Stage 3** VISSIM model with general traffic journey time collected to (Route One) and from (Route Two) East Grinstead. As set out in figure 4.1 below.

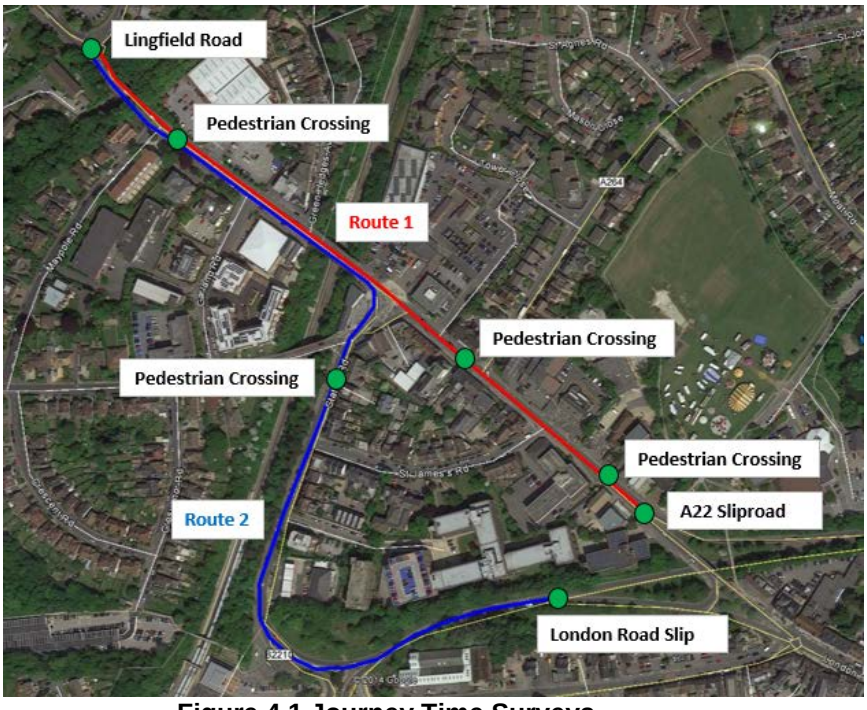


Figure 4.1 Journey Time Surveys

- **In Car Video Surveys** were also carried out on 4th and 5th of November to record the density of queued traffic along Imberhorne Lane, the A264 Copthorne Road and the A22 London Road to/from its junction with Lingfield Road during both AM and PM Peak. Survey vehicles drove along the A22 western corridor, A264 Copthorne Road and the Imberhorne Lane until reached the end of the queue before performing a U-turn and re-joining the back of the queue and returning along the route as set in figure 4.2 below. The purpose of this survey was to measure queues and to understand the interaction between the junctions and identify any impediments caused by blocking back.

Figure 4.2 In-Car Video Surveys

4.2 The survey results were subsequently analysed, compared and contrasted with the modelling results abstracted from Atkins **Stage 3** East Grinstead Transport Study and the Mid Sussex Transport Study.

4.3 The combination of survey methods has enabled a detailed understanding of the operation of the East Grinstead highway network to be developed. Whilst previous studies have undertaken traffic counts and journey time surveys, no study has undertaken these surveys combined with in car video surveys of traffic conditions on key routes. It is this combination of survey methods that has enabled a fuller understanding of

highway conditions to be developed, the extensive video footage has enabled the intricacies of the operation of the network to be understood.

QUEUE SURVEYS

4.4 The obtained queue lengths are summarised in table 4.1 below:

- **The A264 / The B2028 Junction**

AM Peak	Copthorne Common		Turners Hill NB		Snow Hill		Turners Hill SB	
	04-Nov	05-Nov	04-Nov	05-Nov	04-Nov	05-Nov	04-Nov	05-Nov
07:00:00	6	6	13	9	8	12	7	8
07:15:00	7	6	13	20	12	11	25+	14
07:30:00	8	9	25+	21	12	29	25+	24
07:45:00	5	9	25+	21	25+	25+	25+	20
08:00:00	6	9	25+	22	25+	25+	18	21
08:15:00	4	3	25+	15	25+	25+	20	22
08:30:00	4	2	25+	10	25+	25+	25+	19
08:45:00	6	0	13	12	25+	20	25+	21
09:00:00	9	3	25+	21	25+	26	25+	12
09:15:00	4	8	25+	21	25+	18	25+	16
09:30:00	4	6	25+	14	24	10	25+	14
09:45:00	3	2	12	5	18	9	25+	12
PM Peak	**04-Nov**	**05-Nov**	**04-Nov**	**05-Nov**	**04-Nov**	**05-Nov**	**04-Nov**	**05-Nov**
15:00:00	4	4	17	16	10	9	17	12
15:15:00	7	4	25+	18	14	12	16	9
15:30:00	8	3	25+	16	16	10	25+	18
15:45:00	5	3	25+	14	16	12	25+	22
16:00:00	8	9	25+	18	22	16	25+	20
16:15:00	6	3	25+	17	20	11	25+	17
16:30:00	9	3	25+	15	24	14	25+	22
16:45:00	6	3	25+	16	25+	24	25+	22
17:00:00	7	2	25	14	25+	22	25+	20
17:15:00	4	4	25+	11	25+	17	25+	18
17:30:00	4	2	25+	8	22	25+	25+	23
17:45:00	5	2	25+	7	25+	25+	25+	22
18:00:00	4	3	12	5	25+	23	25+	21
18:15:00	4	2	4	5	10	10	25+	10
18:30:00	2	0	7	6	8	9	25+	11
18:45:00	0	0	5	5	5	4	25+	7

Table 4.1 Queue Length at the A264/the B2028 Junction

4.5 As can be seen from the above, the junction is operating in excess of its recommended design capacity and with a queue length in excess of 150 metres recorded

during both AM and PM Peaks along Turners Hill and Snow Hill at the A264/B2028 roundabout.

4.6 In comparison to the MSTS SATURN Model, it appears that the model was overly optimistic with regard to the operational efficiency of this junction with a minimum delay of less than 10 seconds predicted for a future year 2021 with committed development. This is summarised in table 4.2 below.

The A264 /B2028	Traffic Surveys				MSTS -			
	4th Nov		5th Nov		+ Committed Dev AM Peak Year 2021		Base Model – Year 2010	
	AM Peak	PM Peak	AM Peak	PM Peak	Delay	PRC	Delay	PRC
A264 West	6	7	9	9	9.4 sec	96.80%	9.0	83.8%
Turners Hill	25+	25+	22	9				
Snow Hill	25+	25+	25+	25+				
Turners Hill	25+	25+	22	23				

Table 4.2 the A264/the B2028 Junction – Comparison Study

4.7 An ARCADY model was developed and validated to test the junction with the 2014 survey traffic flows, the results of this modelling are summarised below in Table 4.3 with the full ARCADY outputs included at **Appendix 4**. The results indicate that the junction is operating well over capacity with an RFC of over 1.0.

A264/B2028	AM Peak Based on Nov 2014 Surveys	
	Delay	RFC
A264 West	8.66	0.76
Turners Hill	92.2	0.97
Snow Hill	174.98	1.02
Turners Hill	128.81	1.00

Table 4.3 A264/B2028 ARCADY Results Based Upon 2014 Surveys

4.8 It should be noted that SATURN is a conventional static traffic assignment model that distributes the traffic based upon journey times along different links to achieve a network equilibrium. Therefore, in failing to comprehend the congestion at this key junction, there is some uncertainty as to the reliability and accuracy of the network model results and thus the future year predictions.

- **The B2110 / The B2028 Junction**

AM Peak	Church Lane		Lion Lane		North Street EB		North Street WB		East Street	
	04-Nov	05-Nov	04-Nov	05-Nov	04-Nov	05-Nov	04-Nov	05-Nov	04-Nov	05-Nov
07:00:00	3	10	0	0	3	3	2	0	2	2
07:15:00	16	25	2	0	4	4	0	4	5	4
07:30:00	25	25	0	0	4	6	2	2	6	4
07:45:00	25	25	0	0	7	7	4	4	8	4
08:00:00	25	25	0	0	4	7	2	4	10	10
08:15:00	25	25	0	0	7	6	0	2	5	10
08:30:00	25	25	0	0	7	7	6	2	5	12
08:45:00	25	25	0	0	7	6	0	3	5	6
09:00:00	25	25	0	0	7	6	3	4	9	8
09:15:00	25	25	0	0	3	2	2	2	3	6
09:30:00	25	17	0	0	2	0	0	2	3	4
09:45:00	25	25	0	0	2	2	0	2	3	2
PM Peak	**04-Nov**	**05-Nov**	**04-Nov**	**05-Nov**	**04-Nov**	**05-Nov**	**04-Nov**	**05-Nov**	**04-Nov**	**05-Nov**
15:00:00	15	12	0	0	6	6	3	2	4	5
15:15:00	25	25	0	3	6	6	6	4	14	5
15:30:00	25	25	0	0	4	3	0	3	16	6
15:45:00	25	25	0	0	7	3	3	3	12	14
16:00:00	25	25	0	0	7	5	5	3	8	3
16:15:00	25	25	0	0	7	5	3	2	14	5
16:30:00	25	25	0	0	4	6	2	3	6	5
16:45:00	25	25	0	0	6	7	0	3	4	6
17:00:00	25	25	0	0	6	7	3	3	4	6
17:15:00	25	25	0	0	7	7	3	0	7	15
17:30:00	25	25	0	0	7	7	3	4	10	15
17:45:00	25	25	0	0	7	7	3	3	6	18
18:00:00	25	25	0	0	4	7	0	4	4	20
18:15:00	25	25	0	0	4	5	2	4	3	4
18:30:00	25	25	0	0	3	3	0	0	2	4
18:45:00	25	10	0	0	0	2	0	0	2	3

Table 4.4 Queue Length at the B2110/B2028 Junction

4.8 A similar situation was observed at this junction along Church Lane with a consistent queue of traffic in excess of 25 vehicles recorded over a 2.5 – 3.0 hour period between 07:15-10:00 and 15:15 – 18:30. This is shown in table 4.4 above.

4.9 This is in accordance with the modelling results extracted from the Mid Sussex Transport Strategy Stage 1 Study at the B2028/B2110 junction with a prolonged delay of 380 seconds predicted for Year 2010 base flow and 403 seconds for year 2021 with only Committed Development. The results are summarised in table 4.5.

The B2028/B2110	4th Nov		5th Nov		MSTS			
					+ Committed Dev AM Peak Year 2021		Base Model Year 2010	
	AM Peak	PM Peak	AM Peak	PM Peak	Delay	PRC	Delay	PRC
Church Lane	25+	25+	25+	25+	402.7sec	120.10%	380.2sec	118.9%
East Street	0	0	0	0				
Lion lane	7	7	7	7				
North Street EB	4	3	4	4				
North Street WB	5	10	12	18				

Table 4.5 Turner's Hill Junction – Comparison Study

4.10 However, despite identifying capacity constraints at this bottleneck junction, no highway enhancements have been proposed within the study to deliver a sustainable highway solution that will provide spare capacity to accommodate the future growth in the area. Without capacity improvements the delays at this junction will be exacerbated in the future with any form of traffic growth.

JOURNEY TIME SURVEY

4.11 To establish the appropriateness of the previous journey time analysis, fresh independent surveys have been undertaken against which the previous work was compared.

4.12 Tables 4.6 and 4.7 compare the journey times of the November 2014 surveys with the Atkins **Stage 3** study.

Table 4.6 Comparison Study – Journey Time Survey Route 1

Route 1 Journey Time (sec) Lingfield Rd to Moat Rd		Traffic Survey			Atkins Stage 3 Study			Percentage Increase		
		04/11/2014	05/11/2014	Ave	Year 2011	Year 2021 + Committed + Do Nothing	Do Something	Year 2011	Year 2021 + Committed + Do Nothing	Do Something
AM Peak	Average Journey Time	98	97	97.5	91	92	84.5	7%	6%	-13%
08:15-09:45	Maximum Journey Time	100	108	104	-	-		-	-	
PM Peak	Average Journey Time	106	115	110.5	90	95	97	23%	16%	-12%
(16:45-18:15)	Maximum Journey Time	137	146	141.5	-	-		-	-	

Table 4.7 Comparison Study – Journey Time Survey Route 2

Route 2 Journey Time (sec) London Rd Slip to Lingfield Rd		Traffic Survey			Atkins Stage 3 Study			Percentage Increase		
		04/11/2014	05/11/2014	Ave	Year 2011	Year 2021 + Committed + Do Nothing	Do Some-thing	Year 2011	Year 2021 + Committed + Do Nothing	Do Something
AM Peak	Average Jour-ney Time	97	117	107	200	244	239.3	-46.5%	-56%	-55%
08:15-09:45	Maximum Journey Time	109	132	120.5	-	-		-	-	
PM Peak	Average Jour-ney Time	144	184	164	143	215	90	15%	-24%	82%
(16:45-18:15)	Maximum Journey Time	208	299	253.5	-	-		-	-	

IN CAR VIDEO SURVEY

4.13 Queue delays observed through the in car video survey along the A264, the A22 and Imberhorne Lane are summarised below in 20 minute segments.

Route 1 – The A22 Southbound Traffic

4.14 Travelling northbound towards East Grinstead, queues in the morning noticeably started to build from 7:50am with the traffic gradually reducing after 10:00am. Persistent slow crawling traffic queues in excess of 500 metres were observed between 07:50-09:30 from the Lingfield Road roundabout with queues regularly at 1000m. The queues are summarised in table 4.8.

Queue Length (Recorded from Lingfield Rd Jct)	AM Peak	
	04/11/2014	05/11/2014
07:30-07:50	200 metres / 120 sec	Clear / Free Flow
07:50-08:10	500 metres / 330 sec	560 metres / 380 sec
08:10-08:30	950 metres / 280 sec	1000 metres / - sec
08:30-08:50	1000 metres / 930 sec	950 metres / 770 sec
08:50-09:10	900 metres / 560 sec	1000 metres / 916 sec
09:10-09:30	700 metres / 370 sec	950 metres / 586 sec

Table 4.8 Delay recorded along the A22 SB Traffic – AM Peak

4.15 In the PM peak, an extended peak period between 16:00 and 18:00 was observed on the 4th of November with the most congested period occurring between 16:20 – 17:20 with a queue of 1200m. In contrast during the survey on the 5th of November, the queue starts to form at the same time of 16:20 but cleared later after 18:00 with a maximum queue length of approximately 760 metres observed between 17:20-17:40. The queues are summarised in table 4.9.

Queue Length (Recorded from Lingfield Rd Jct)	PM Peak	
	04/11/2014	05/11/2014
16:00-16:20	800 metres / 440 sec	150 metres / 180 sec
16:20-16:40	850 metres / 530 sec	520 metres / 210 sec
16:40-17:00	870 metres / - sec	720 metres / 200 sec
17:00-17:20	1200 metres / 570 sec	- / 432 sec
17:20 - 17:40	740 metres / 425 sec	760 metres / 390 sec
17:40 - 18:00	640 metres / 400 sec	650 metres / 240 sec
18:00 - 18:20	180 metres / 280 sec	34 metres / 205 sec

Table 4.9 Delay recorded along the A22 SB Traffic – PM Peak

Route 1 –The A22 Northbound Traffic

4.16 Travelling northbound towards the M25, significant morning commuter traffic firstly arrived at 07:15 and gradually eased off after 08:50 with persistent slow moving traffic queues between 07:30-08:50 from the Imberhorne Ln Junction. These results are summarised in table 4.10.

Queue Length (Recorded from Imberhorne Ln Jct)	AM Peak	
	04/11/2014	05/11/2014
07:30-07:50	1000 metres / 440 sec	700 metres / 395 sec
07:50-08:10	700 metres / 660 sec	620 metres / 815 sec
08:10-08:30	600 metres / 485 sec	1100 metres / 480 sec
08:30 - 08:50	500 metres / - sec	775 metres / 420 sec
08:50-09:10	30 metres / 18 sec	400 metres / - sec
09:10-09:30	20 metres / clear run	250 metres / 123 sec

Table 4.10 Delay recorded along the A22 NB Traffic – AM Peak

4.17 In the PM peak, a maximum queue in excess of 800 metres was observed on both survey days between 16:20 and 16:40. An extended peak period between 16:00 and 18:00 was observed on 4th November peaking between 16:20 – 17:20. A different pattern was observed during the survey on the 5th of November, with the queuing traffic clearing from 17:20 with a central peak observed between 16:00-17:00. These results are summarised in table 4.11.

Queue Length (Recorded from Imberhorne Ln Jct)	PM Peak	
	04/11/2014	05/11/2014
16:00-16:20	640 metres / 220 sec	630 metres / 345 sec
16:20-16:40	800 metres / 385 sec	860 metres / 339 sec
16:40-17:00	- / 360 sec	450 metres / 315 sec
17:00-17:20	850 metres / 120 sec	130 metres / 120 sec
17:20-17:40	300 metres / 75 sec	30 metres / 45 sec
17:40-18:00	150 metres / clear run	45 metres / 55 sec
18:00-18:20	Clear / 75 sec	Clear / Free Flow

Table 4.11 Delay recorded along the A22 NB Traffic – PM Peak

Route 2 – The A264

4.18 Significant morning traffic firstly arrived at 07:30 and gradually diminished after 09:00 with a queue length in excess of 50 vehicles observed. Whereas for PM Peak, a pro-longed peak dispersion over 2.5 hours was observed on the 5th of November with a maximum queue length of 85 vehicles reported at 18:10. This data is summarised in table 4.12.

Queue Length (Recorded from Felbridge Jct)	AM Peak	
	04/11/2014	05/11/2014
07:10-07:30	14 vehicles / 30 sec	10 vehicles / 25 sec
07:30-07:50	34 vehicles / 135 sec	35 vehicles / 120 sec
07:50-08:10	50 vehicles / 180 sec	39 vehicles / 172 sec
08:10-08:30	28 vehicles / 32 sec	25 vehicles/37 sec
08:30 - 08:50	20 vehicles / 55 sec	26 vehicles / 32 sec
08:50-09:10	10 vehicles / 30 sec	12 vehicles / 71 sec
09:10-09:30	Clear	Clear / 49 sec
	PM Peak	
15:40–16:00	14 vehicles / 40 sec	10 vehicles / 74 sec
16:00-16:20	60 vehicles / 310 sec	50 vehicles / 120 sec
16:20-16:40	25 vehicles / 85 sec	17 vehicles / 120 sec
16:40-17:00	14 vehicles / 40 sec	29 vehicles / 90 sec
17:00-17:20	16 vehicles / 205 sec	27 vehicles / 280 sec
17:20-17:40	9 vehicles / 75 sec	52 vehicles / 154 sec
17:40-18:00	15 vehicles / 55 sec	65 vehicles / 292 sec
18:00-18:20	11 vehicles / 45 sec	85 vehicles / 360 sec

Table 4.12 Delay recorded along the A264

Route 2 – Imberhorne Lane

4.19 A significant queue in excess of 50 vehicles with associated delays was observed during the AM Peak between 07:30-08:30 with the traffic gradually dispersing after 08:50. In the PM Peak, queuing length varied during the different time segments and were observed to be dispersed within a single cycle time. This data is summarised in table 4.13.

Queue Length (Recorded from Felbridge Jct)	AM Peak	
	04/11/2014	05/11/2014
07:10-07:30	16 vehicles / 45 sec	15 vehicles / 60 sec
07:30-07:50	51 vehicles / 200 sec	53 vehicles / 75 sec
07:50-08:10	56 vehicles / 240 sec	55 vehicles / 245 sec
08:10-08:30	65 vehicles / 330 sec	81 vehicles / 380 sec
08:30 - 08:50	32 vehicles / 70 sec	29 vehicles / 113 sec
08:50-09:10	Clear / 50 sec	15 vehicles / 50 sec
09:10-09:30	Clear / Free Flow	Clear / Free Flow
	PM Peak	
15:40–16:00	10 vehicles / 25 sec	Clear / 20 sec
16:00-16:20	37 vehicles / 190 sec	Clear / 72 sec
16:20-16:40	10 vehicles / 45 sec	12 vehicles / 11 sec
16:40-17:00	5 vehicles / 110 sec	12 vehicles / 15 sec
17:00-17:20	Clear / 85 sec	16 vehicles / 120 sec
17:20-17:40	27 vehicles /210 sec	12 vehicles / 157 sec
17:40-18:00	7 vehicles / 50 sec	5 vehicles / 18 sec
18:00-18:20	5 vehicles / 25 sec	Clear / 13 sec

Table 4.13 Delay recorded along Imberhorne Ln

4.20 In summary:

- The A22 western corridor suffers from severe congestion between Imberhorne Lane and Lingfield Road in both directions with a sustained peak of at least 1.5 hours experienced in the AM and 2 hours during the PM Peak.
- Delays caused by yellow box junctions and pedestrian crossings were also identified between Lingfield Road and Imberhorne Lane Junctions.
- Loss of capacity at the Imberhorne Lane signalised junction due to blocking back at the upstream Felbridge Junction was observed during the in-car video survey. Thus impeding left turning vehicles discharging from Imberhorne Lane.
- Due to the capacity constraints the network is very sensitive to daily flow variation and external factors such as the weather. Any small event can lead to significant delay across the network. This in turn reflects a need to consider the highway network holistically rather than on a junction by junction approach.

4.21 The collected maximum queue length at each individual junction was subsequently compared and contrasted with the Atkins Stage 3 Transport Study modelling results. This is set out in tables 4.14 and 4.15.

AM Peak (MMQ)	Atkins Stage 3		2014 In-Car Video Survey			Percentage Increase in QL	
	Year 2011	Year 2021 + Com Dev + Do Nothing	04/11/14	05/11/14	Ave	Year 2011	Year 2021 + Com Dev + Do Nothing
Felbridge Junction							
A264 Copthorne Road	30	33	50	39	45	48%	35%
A22 Eastbourne Rd (N)	9	10	13	19	16	78%	60%
A22 London Road (S)	10	28	35	41	38	280%	36%
A22 London Road/Imberhorne Lane							
Imberhorne Lane	15	19	65	81	73	387%	284%
A22 London Rd (N)	25	27	16	15	16	-38%	-43%
A22 London Rd (S)	23	34	167 (appr.1000m)	180 (appr.1100m)	174 (appr.1050m)	657%	412%
A22 London Road/Lingfield Rd							
Lingfield Road	57	67	-	-	-	-	-
A22 London Road (N)	101	149	167 (appr.1000m)	167 (appr.1000m)	167 (appr.1000m)	65%	12%
A22 London Road (S)	141	168	-	-	-	-	-

Table 4.14 Comparison with Atkins Stage 3 – AM Peak

PM Peak (MMQ)	Atkins Stage 3		In-Car Video Survey			Percentage Increase	
	Year 2011	Year 2021 Do Nothing	04/11/2014	05/11/2014	Ave	Year 2011	Year 2021
Felbridge Junction							
A264 Copthorne Road	26	33	60	50	55	112%	67%
A22 Eastbourne Rd (N)	16	23	13	11	12	-25%	-48%
A22 London Road (S)	12	25	18	20	19	58%	-24%
A22 London Road/Imberhorne Lane							
Imberhorne Lane	16	18	36	16	26	63%	44%
A22 London Rd (N)	27	31	22	13	18	-35%	-44%
A22 London Rd (S)	20	27	145 (appr. 870m)	143 (appr. 860m)	144 (appr.865m)	620%	433%
A22 London Road/Lingfield Rd							
Lingfield Road	48	52	-	-	-	-	-
A22 London Road (N)	109	142	200 (appr. 1200m)	127 (appr. 760m)	164 (appr.760m)	50%	15%
A22 London Road (S)	215	232	-	-	-	-	-

Table 4.15 Comparison with Atkins Stage 3 – PM Peak

CONCLUSION

4.22 The 2014 November Surveys indicate that the highway network in and around East Grinstead is heavily congested with prolonged delays encountered over a 2 to 3 hour period during both morning and afternoon peak. The existing transport infrastructure struggles to cope with the current demand of commuting traffic and already operate in excess of its saturation capacity.

4.23 In comparison with the Atkins Stage 3 report, a much longer delay and queueing length was recorded along the A22, Imberhorne Lane and the A264 in both the base-line condition and Year 2021 Do Nothing scenario (with only 765 committed dwellings).

4.24 This can be attributed to a number of issues embedded in the modelling approach adopted in Atkins' Stage 3 Transport Study, namely:

- **Modelling Method** - Instead of a detailed Local Network Transport Model, the study was overly reliant on standalone modelling software to assess the operational efficiency of Felbridge Junction, Imberhorne Ln/The A22 Junction and Lingfield Road/London Road Mini-roundabout and thus failed to reflect interaction between the junctions, especially the blocking back caused by stationary/slow moving traffic.

- **Modelling Periods -** An extended simulation period of at least 2.0-2.5 hours should be adopted to represent the prolonged peak dispersion observed along the A22 and the A264. However, the Atkins Stage 3 Study has only assessed the network performance for a limited window of 08:15 – 09:45 and 16:45-18:15 with the central peak identified as 08:30-09:30 and 17:00-18:00. Concerns are:-
    1. This could significantly overestimate the operational capacity of the network as the software will release the traffic into a free flow system which in reality is already congested.
    2. Underestimation of the traffic demand as traffic counts failed to take into account the suppressed queueing traffic that arrived during the modelling period which then failed to enter or approach the junctions due to the severe congestion.

4.25 These issues have resulted in an over optimistic baseline of traffic conditions that would consequently distort the reliability and accuracy of the future year predictions presented within the Atkins Stage 3 Study. Subsequently this gives rise to questions as to the true level of reserved capacity that could be delivered by the envisaged highway schemes to accommodate the committed dwellings and any new further additional provision.

Future Traffic Growth

4.26 As stated in **Chapter 3**, a total of 532 dwellings are committed within East Grinstead plus additional development traffic from Copthorne Village West and Crawley Down whose associated traffic generation has not been accounted for within Atkins **Stage 3** Traffic Surveys carried out in October 2011.

4.27 The 2014 traffic surveys show that the condition threshold as set out in Atkins **Stage 3** Study for Year 2021 scenarios have already been substantially breached by up to 67% at the Felbridge junction, 433% at the Imberhorne Lane junction and 15% at the Linfield Road junction.

4.28 The severe congestion will be exacerbated with additional traffic generated by the committed dwellings still to be occupied/ built.

4.29 This is without taking into account any general background traffic growth arising from the wider growth in car ownership, economic growth or other development that will have an impact along the key corridors to/from East Grinstead.

4.30 It is considered that without significant highway enhancements, the network in East Grinstead will be brought to a standstill with severe delays and congestion which may affect the economic strength and attractiveness to investment of the town, the quality of local resident's day to day life, and subsequently the level of noise and air pollution.

5.0 IMPACT OF COMMITTED DEVELOPMENT TRAFFIC

5.1 Each of the 22 sites making up the 532 EG housing commitments as set out within the MSDC Commitment Schedule as at 1st September 2014, which is included at **Appendix 1,** were examined and analysed to determine the increased traffic flows associated with that site. The methodology for assessing the trip generation and trip assignment of this traffic was the same as was used within the Atkins **Stage 3** report.

5.2 These sites were then grouped into the EG Wards of Town (North and South), Ashplats, Baldwins, Imberhorne and Herontye and totalled to produce the increased passenger car units (pcu) volumes and also % increase in pcus, for both AM and PM Peaks.

5.3 The resultant traffic flows are shown on the diagrams in **Appendix 5** with the principle figures summarised below in Table 5.1.

Table 5.1 Increased Peak Hour Total Traffic Inflow by Junction - Total Volume and % Increase above 2014 levels

Junction	AM Peak Traffic (pcu*)				PM Peak Traffic (pcu*)			
	Total Vol.	**EG Dev	***CVW	% Inc.	Total Vol.	**EG Dev	***CVW	% Inc.
The A22/A264 East (Moat Road)	162	132	31	8	181	172	9	8
The A22 / Lingfield Road	193	152	41	9	183	166	17	8
The A22 / Imberhorne Lane	249	180	69	10	221	196	25	9
The A22/ A264 Felbridge Junction	235	166	69	10	205	180	25	8

*pcu – passenger car unit

**EG Dev – 532 approved housing development

*** Copthorne Village West Development

5.3 From table 5.1 it can be seen the EG 532 Housing Approved Developments together with the traffic inflow from Copthorne Village West will in the near future, when built/occupied, have a material additional impact on the key junctions of the EG traffic network.

5.4 This is illustrated in Table 5.1 which shows increased inflows across all the key junctions in both the AM and PM peak hours. At the A22/A264 junction an increase of 162 pcus is shown and at the A22/Imberhorne Lane junction an increase of 249 pcus is shown which represents an 8% and 10% increase over 2014 traffic levels respectively.

6.0 CONCLUSION

6.1 The analysis within Atkins **Stage 3** report significantly underestimates the serious nature of traffic congestion and delay in and around East Grinstead this is evidenced by the 2014 November traffic surveys and the modelling results obtained from MSDC Stage 1 Study at Turners Hill (B2028/B2110) and Dukes Head (A264/B2028).The conclusions of the Atkins **Stage 3** study should be treated with caution.

6.2 Predicted conditions for the year 2021 have already been breached, however significant development has yet to hit the East Grinstead highway network. When the traffic associated with these committed schemes comes forwards traffic conditions in East Grinstead will deteriorate still further.

6.3 The Do Something measures set out within Atkins **Stage 3** are considered to be largely undeliverable, and in any case the ceiling of development that these theoretical improvements may enable has already been breached.

6.4 The town network is operating ineffectively at peak times with a prolonged delay of over 2 – 3 hours observed during AM and PM peaks.

6.5 It would be unwise to allow any additional development until a very comprehensive, up to date and accurate study of the whole town transport network and key routes to M23 and M25 has been completed and a clear strategy for improving conditions has been developed. Existing traffic models have been created on a piece meal basis and do not accurately model the interaction between junctions in the town, particularly along A22.

6.6 It is considered that a town wide traffic model that extends out onto some key related routes to the M23 and M25 should be developed, this model must be validated accurately and take account of the large level of committed development in the MSDC area. This model can then be used to accurately assess potential improvements that are realistic and which recognise the constraints that exist.

6.7 An objective EG plan is a fundamental step, balancing housing requirement and its location against the capability of a whole town transport network plan to absorb it, which recognises the present traffic conditions, facts and serious constraints. Noting

at the same time the much higher levels of housing approvals already granted well above the Atkins 3 levels.

6.8 The approval of additional piece meal standalone unplanned development will create even further delay and congestion to the stated WSCC 'severe conditions that already exist' and further compromise the economic and social viability of the town as more people avoid the area due to traffic conditions.

Appendix 1
MSDC Housing Commitment Schedule as at 1 September 2014.

Mid Sussex District Council: Commitment Schedule as at 1st September 2014 - large sites (6+ units) over Plan Period

Town / Parish	Ward	Site Address (sites of 6+ units)	Overall Total (Gross)	Overall Losses (Gross)	Overall Cmpltns (Net)	Total Remaining (Net)	PP Ref #	PP Lapse Date	SHLAA ID#
Ansty & Staplefield	Cuckfield	North of Rookery Farm Rocky Lane Haywards Heath	45	0	0	45	Allocated		94
Ansty & Staplefield	Cuckfield	Land South of Rocky Lane, Haywards Heath (Phase 1)	96	0	0	96	12/00535/OUT	30/08/2015	239
Ansty & Staplefield	Cuckfield	Land Souh of Rocky Lane, Haywards Heath (Phase 2)	101			101	13/00656/OUT	Pending S106	485
Ansty & Staplefield		Sunnybrae, Valebridge Road, Burgess Hill (Lewes DC)	1	1		0			N/A
Ansty & Staplefield	Ansty	Ansty Cross Inn, Cuckfield Road, Ansty	6	0	0	6	14/01166/FUL	21/05/2014	640
Ashurst Wood	Ashurst Wood	Adj. Ashurstwood Abbey, Hammerwood Road, Ashurst Wood	12	0	1	11	11/02918/FUL	16/12/2014	607
Ardingly		Land between Lodgeland and Standgrove Place, College Lane, A	37	0	0	37	11/03417/OUT	22/05/2017	187
Bolney	Bolney	G&W Motors London Road Bolney	0	0	0	0	Allocated	Unlikely	82
Bolney	Bolney	Land west of London Road, Bolney	10	0	0	10	13/03506/FUL	13/03/2017	707
Burgess Hill	Chanctonbury Ward	Station yard/car park Burgess Hill	100	0	0	100	Allocated		83
Burgess Hill	Dunstall Ward	Covers Timber Yard 107 Fairfield Road Burgess Hill	15	0	0	15	12/0152/FUL	23/07/2015	73
Burgess Hill	Franklands Ward	The Oaks Centre Junction Road Burgess Hill	12	0	0	12	Allocated		84
Burgess Hill	Franklands Ward	86 Junction Road Burgess Hill	13	0	0	13	12/02873/FUL	Commenced	85
Burgess Hill	Franklands Ward	88 Junction Road, Burgess Hill	13	0	0	13	11/01821/FUL 13/033(	Commenced	610
Burgess Hill	Leylands Ward	North of Faulkners Way Burgess Hill	50	0	0	50	Allocated		88
Burgess Hill	Leylands Ward	Gas holder station Leylands Road Burgess Hill	58	0	0	58	Allocated		34
Burgess Hill	Leylands Ward	Former Sewage Treatment Works, Burgess Hill	325	0	0	325	08/1644/OUT	24/06/2017	45
Burgess Hill	Leylands Ward	Kings Head, 102 London Road, Burgess Hill, West Sussex, RH1	13	0	0	13	12/04048/FUL	21/02/2016	41
Burgess Hill	Meeds Ward	10 Mill Road, Burgess Hill, West Sussex, RH15 8DR	10	0	0	10	12/02959/FUL	25/03/2016	168
Burgess Hill	Meeds Ward	1st/ 2nd Floor 24 Church Road, Burgess Hill	6	0	0	6	13/03408/PDOFF	30/05/2016	161
Burgess Hill	St Andrews Ward	Adj Manor Road Burgess Hill	122	0	94	28	10/01898/FUL	Commenced	90
Burgess Hill	St Andrews Ward	Keymer Tile Works Nye Road Burgess Hill	475	0	0	475	09/03697/OUT	30/04/2017	91
Burgess Hill	St Andrews Ward	Land East of Kingsway Burgess Hill	480	0	0	480	12/01532/OUT	10/05/2016	233
Burgess Hill	St Andrews Ward	The Garage, 1 Janes Lane, Burgess Hill, West Sussex, RH15 0(	9	0	0	9	12/01690/FUL	12/11/2015	646
Burgess Hill	Town Ward	Open air market Burgess Hill	0	0	0	0	Allocated	Unlikely	92
Burgess Hill	Town Ward	Osborne House Station Road Burgess Hill	21	0	0	21	14/01811/FUL	18/08/2017	419
Burgess Hill	Victoria Ward	71 Victoria Road, Burgess Hill	14	0	0	14	13/02759/FUL	30/12/2106	693
Burgess Hill	Victoria Ward	76 Victoria Road, Burgess Hill	11	0	0	11	13/03617/FUL	27/01/2017	692
Burgess Hill	Victoria Ward	Marlborough Court, Royal George Road, Burgess Hill	6	20	0	-14	13/01183/FUL	01/07/2013	654
Burgess Hill	West Ward	Land north of Maltings Park (Phase 1 and 2) Burgess Hill (Woodl	94	0	25	69	09/00602/FUL	Commenced	93
Cuckfield	Cuckfield	Land at Bylanes Close Cuckfield	42	0	2	40	12/01497/REM	Commenced	64
Cuckfield	Cuckfield	Land Parcel East of Ardingly Road, Cuckfield, West Sussex, ,	14	0	0	14	12/03750/OUT	04/02/2016	539
Cuckfield	Cuckfield	Yew Tree Court, London Lane, Cuckfield	10	15	0	-5	13/03501/FUL	22/01/2017	695
East Grinstead	Imberhorne Ward	West of Imberhorne Lane, East Grinstead	100	0	23	77	10/02071/OUT	Commenced	235
East Grinstead	Imberhorne Ward	Car Park, Felbridge Hotel, London Road, East Grinstead	12	0	0	12	11/03649/FUL	commenced	475
East Grinstead	Imberhorne Ward	218 London Road, East Grinstead	14	0	0	14	12/04326/fUL	10/10/2016	259
East Grinstead	Imberhorne Ward	17 Copthorne Road, Felbridge, East Grinstead	26	1	0	25	12/01796/FUL	20/12/2016	548
East Grinstead	Imberhorne Ward	Garland Court, Garland Road, East Grinstead	24	0	0	24	13/04309/PDOFF	30/05/2016	697
East Grinstead	North Ward	Stonequarry Woods East Grinstead	40	0	0	40	Allocated		96
East Grinstead	North Ward	South of The Old Convent & St Margarets Convent, Adj to Moatfi	74	0	0	74	14/00294/FUL	25/06/2015	97+98
East Grinstead	North Ward	Rear of 240-258 and adj Ashplats House, Holtye Rd, East Grinst	141	1	51	89	12/00716/REM	Commenced	52
East Grinstead	South Ward	Tennis & Squash Club Ship Street East Grinstead	0	0	0	0	Allocated	Unlikely	101
East Grinstead	South Ward	Dunnings Mill Snooker Club Dunnings Road East Grinstead	7	0	2	5	11/03093/FUL	commenced	316
East Grinstead	Town Ward	33 - 35 Cantelupe Road, East Grinstead, West Sussex, RH19 3E	14	0	0	14	11/02527/FUL	08/12/2014	608
East Grinstead	Town Ward	65 London Road, East Grinstead	7	0	0	7	13/02120/FUL	commenced	638
East Grinstead	Town Ward	1 - 25 Bell Hammer, East Grinstead	28	25	0	3	13/01343/FUL	15/10/2016	696
East Grinstead	Town Ward	Sussex House, London Road, East Grinstead	8	0	0	8	13/04040/FUL	27/01/2017	409
East Grinstead	Town Ward	St James House, 150 London Road, East Grinstead	27	0	0	27	13/00636/PDOFF	30/05/2017	577
East Grinstead	Town Ward	3rd Floor, St James House, 150 London Road, East Grinstead	6	0	0	6	14/01370/FUL	10/06/2017	577
East Grinstead	Town Ward	Greenstede House, Wood Street, East Grinstead	13	0	0	13	13/03298/PDOFF	30/05/2016	123
East Grinstead	Town Ward	Phoenix House, 23-25 Cantelupe Road, East Grinstead	24	0	0	24	13/04062/PDOFF	30-02/2016	259
East Grinstead	West Ward	Junction of Windmill Lane/London Road East Grinstead	40	5	0	35	Allocated		102
East Grinstead	Ashplats	St Lukes House Vicarage, Holtye Road, East Grinstead	14	0	0	14	12/00439/FUL	08/07/2016	439
East Grinstead		The Vinesong Trust, Warrenside, College Lane, East Grinstead, West Su	14	0	0	14	12/01877/OUT	14/05/2017	444
East Grinstead		67-69 London Road, East Grinstead	7	0	0	7	14/00572/FUL	10/07/2014	705
Hassocks	Hassocks	Sandbrook, Parklands, Hassocks	8	12	0	-4	13/02809/FUL	19/11/2016	699
Hassocks	Hassocks Keymer North	Stafford House 91 Keymer Road Hassocks	14	0	0	14	12/03748/FUL	18/11/2013	472
Hassocks	Hassocks Stonepound	Station Goods Yard Hassocks	70	0	0	70	Allocated		106
Hassocks	Hassocks Stonepound	Land rear of Stafford House, Ockley Lane, Hassocks	17	0	0	17	12/00637/FUL	01/01/2015	161
Haywards Heath	Ashenground Ward	Ex Horace Hilton Gower Road Haywards Heath	14	0	0	14	11/03486/FUL	Commenced	126
Haywards Heath	Ashenground Ward	Vicotria Gate, 119 -127 South Road, Haywards Heath	10	0	0	10	13/2794/PDOFF	30/05/2016	417
Haywards Heath	Franklands Ward	Anscombe Wood (parcel X)Fox Hill Haywards Heath	90	0	86	4	07/01088/REM	Commenced	108
Haywards Heath	Franklands Ward	Former St. Francis Hospital, Colwell Road, Haywards Heath	85	0	61	24	05/02335/OUT	Commenced	334
Haywards Heath	Franklands Ward	North of 99 Reed Pond Walk Franklands Village Haywards Heatl	18	0	0	18	13/01776/FUL	13/08/2016	531
Haywards Heath	Franklands Ward	East of hospital playing field (Parcel Y), Haywards Heath	132	0	0	132	08/02692/REM	Commenced	109
Haywards Heath		The Mayflower Pub, America Lane, Haywards Hath	7	0	0	7	13/01164/FUL	06/06/2016	652
Haywards Heath	Franklands Ward	Oldfield, 55 Lewes Road, Haywards Heath	10	0	0	10	13/02431/FUL	12/11/2013	700
Haywards Heath	Heath Ward	Corner Paddockhall Road/Milton Road Haywards Heath	14	0	0	14	13/00904/EOT	12/06/2016	131
Haywards Heath	Heath Ward	The Oaks, 36 Paddockhall Road, Haywards Heath, West Sussex, RH16 1	14	5	0	9	14/01335/FUL	22/08/2017	454
Haywards Heath	Heath Ward	17-21 Boltro Road Haywards Heath	13	0	0	13	14/00398/FUL	07/05/2017	307
Haywards Heath	Heath Ward	Land parcel south of 9 Mill Hill Close, Haywards Hath	14	0	0	14	12/01298/FUL	Commenced	539
Haywards Heath	Heath Ward	1 -3 Church Road, Haywards Heath	42	0	0	42	13/03814/FUL	05/02/2017	330
Haywards Heath	Heath Ward	Burns House, Harlands Road, Haywards Heath	8	0	0	8	13/04355/PDOFF	30/05/2016	708
Haywards Heath	Heath Ward	6 Heath Square, Boltro Road, Haywards Heath	9	0	0	9	13/03522/PDOFF		702
Haywards Heath	Lucastes Ward	Bolnore Village Phases 4b & 5, south west of Haywards Heath	200	0	0	200	04/02676/OUT	Allocation	110
Haywards Heath	Lucastes Ward	Bolnore Village Phase 4a	192	0	84	108	10/03704/REM	Commenced	110
Haywards Heath	Lucastes Ward	Bolnore Village Phase 4c	9	0	0	9	12/02517/FUL	28/08/2015	110
Haywards Heath	Lucastes Ward	Land north of Butlers Green Road, Haywards Heath	40	0	0	40	12/02822/REM	commenced	201
Haywards Heath	Lucastes Ward	Ashton House Residential And Nursing Home, Bolnore Road, Ha	18	0	0	18	14/00561/FUL	21/05/2017	620
Haywards Heath	Lucastes Ward	Grosvenor Hall, Bolnore Road, Haywards Heath	8	0	0	8	14/00067/PDOFF	30/05/2016	289
Haywards Heath	Lucastes Ward	Land to the West of Beech Hurst, Butlers Green Road, Haywards	131	0	0	131	13/01088/REM	27/06/2016	448
Hurstpierpoint and Saye	Hurst & Downs	Land north of Chalkers Lane, Hurstpierpoint, West Sussex, ,	38	0	0	38	12/02838/FUL	19/12/2015	35
Hurstpierpoint and Saye	Hurst & Downs	Land south of Chalkers lane, Hurstpierpoint, West Sussex	57	0	0	57	13/03305/OUT	15/08/2017	284
Hurstpierpoint and Saye	Hurst & Downs	Sussex House 23 Cuckfield Road, Hurstpeirpoint	6	0	0	6	13/04055/PDFOFF	30/05/2016	377
Hurstpierpoint and Saye	Hurst & Downs	Land rear of 105 - 109 Cuckfield Road, Hurstpierpoint	6	0	0	6	12/03395/FUL	08/082016	380
Lindfield Rural	Lindfield	Gravelye Lane/Lyoth Lane Lindfield	65	0	58	7	10/02911/REM	Commenced	112
Lindfield Rural	Lindfield	Land to the east of Gravelye Lane and south of Scamps Hill, Lind	230	0	0	230	12/04316/FUL	31/10/2016	494
Lindfield Rural	Scaynes Hill	Land between Firlands and the Willows, Church Road, Scaynes I	6	0	0	6	14/00373/FUL	21/03/2017	706
Lindfield Rural	Lindfield	Buxshalls, Ardingly Road, Lindfield, West Sussex, ,	40	21	0	19	14/01120/FUL	23/06/2017	586
Lindfield	Lindfield	Former Blackthorns Nursing Home, Blackthorns Close, Lindfield,	13	0	0	13	12/03227/FUL	commenced	428
Lindfield	Lindfield	Dukes Barn Court, Newton Road,Lindfield	11	14	0	-3	13/02660/FUL	13/11/2016	703
Slaugham	Ardingly & Balcombe	Land North of Black Swan Close, Pease Pottage	51	1	0	50	12/02128/FUL	commenced	152
Slaugham	Ardingly & Balcombe	Land at Caburn and St Georges House, Brighton Road, Handcro	7	0	0	7	13/03768/fUL	04/02/2017	704
Slaugham		Seaspace House, Brighton Road, Handcross	7	0	0	7	14/02534/FUL	res to grant	321
Turners Hill	Crawley Down & Turners H	Clock Field, North Street, Turners Hill	47	0	0	47	11/01332/OUT	12/06/2015	116
Worth	Crawley Down & Turners H	Felbridge Nursery, Crawley Down Road, Felbridge	10	0	0	10	12/00368/FUL	commenced	195
Worth	Crawley Down & Turners H	South of Grange Road Crawley Down	80	0	66	14	11/00649/FUL	Commenced	135
Worth	Crawley Down & Turners H	Land opposite Rufwood, Turners Hill Road, Crawley Down	26	0	0	26	13/01146/FUL	commenced	274
Worth	Crawley Down & Turners H	Pasture Wood, Hophurst Lane, Crawley Down	9	0	0	9	14/01352/FUL	24/06/2017	7
Worth	Crawley Down & Turners H	Land east of Woodlands Close, Crawley Down (phase 1)	46	1	0	45	12/00672/OUT	01/06/2016	518
Worth		Land off Woodlands Close, Crawley down (Phase 2)	51	0	0	51	13/03312/OUT	18/08/2017	672
Worth		Land west of Copthorne	500	0	0	500	13/04127/outes	Pending S106	38
Worth	Crawley Down & Turners H	Palmers Autocentre Turners Hill Road Crawley Down	8	0	0	8	11/03991/OUT	09/02/2015	488

Total (from large sites)	**5362**	**122**	**553**	**4687**
Total (from small sites)				189
Total Commitments (all sites)				**4876**

02.09.2014

Appendix 2
Traffic Survey Data November 2014

advanced transport research

Job Number & Name: 6649 East Grinstead

Site Number/Name: East Grinstead

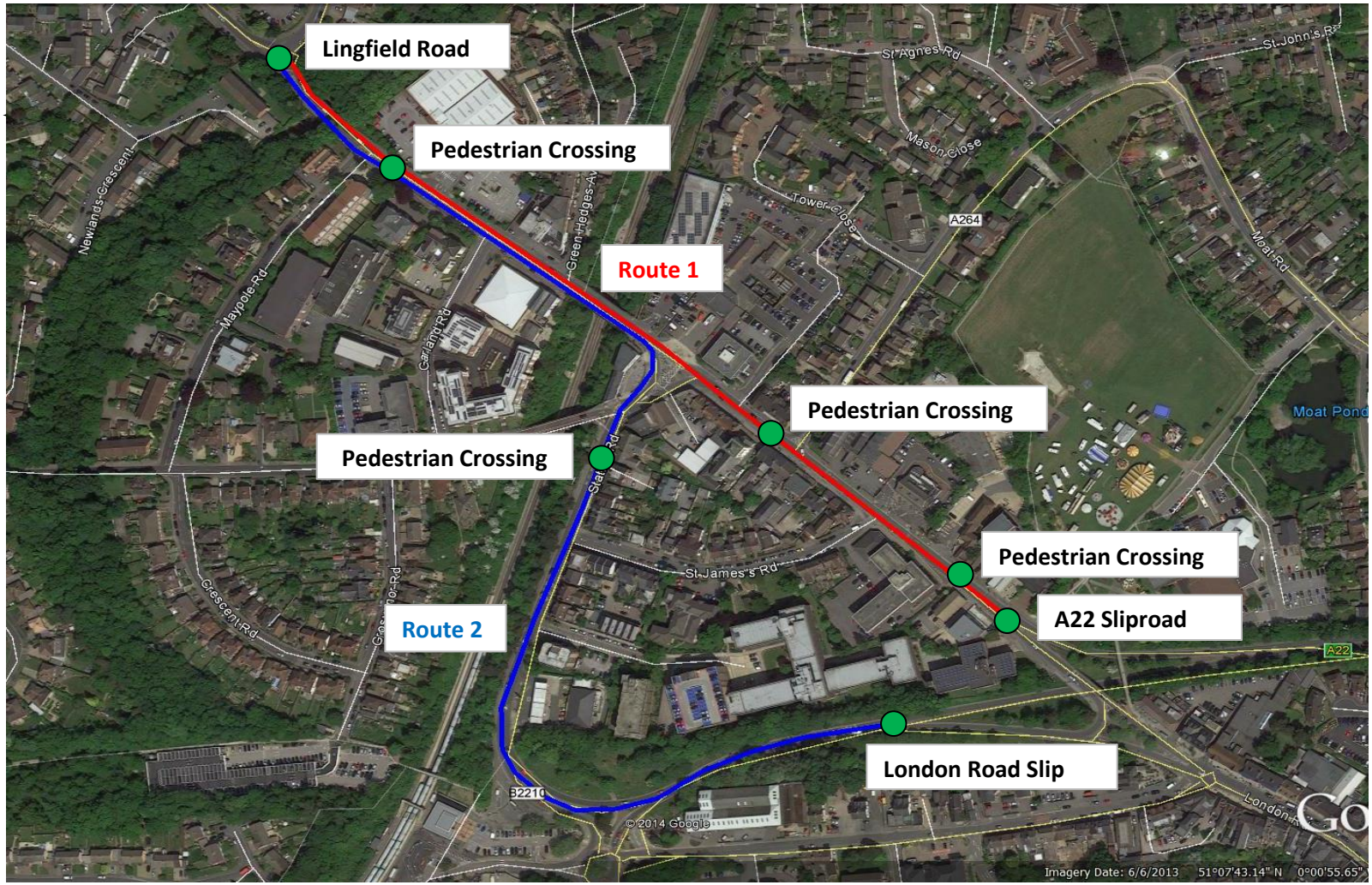
Client: Jubb UK

Date: 04/11/2014

Weather: Cloudy, Wet

Comments: None

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
East Grinstead	*Client:*	**Jubb UK**
Site Plan	*Date:*	**Tuesday 04 Nov 2014**



Advanced Transport Research

East Grinstead

Bus Journey Times

Job Number & Name: **6649 East Grinstead**

Client: **Jubb UK**

Date: **Tuesday 04 November 2014**

Route	Direction	Timing Point	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)
Route 1	Southbound	Lingfield Road roundabout	07:05:38	07:10:41	07:15:56	07:19:55	07:24:32	07:28:58	07:35:35	07:45:29	08:00:04	08:18:05	08:43:19	09:03:49	09:19:37	09:31:22	09:40:52	09:45:53	09:51:44	09:57:17
Route 1	Southbound	Pedestrian Crossing	07:05:49	07:10:53	07:16:08	07:20:04	07:24:59	07:29:13	07:35:50	07:45:45	08:00:29	08:18:44	08:44:04	09:04:21	09:20:10	09:31:37	09:41:29	09:46:06	09:52:13	09:57:45
Route 1	Southbound	Pedestrian Crossing	07:06:17	07:11:29	07:16:34	07:20:34	07:25:35	07:29:58	07:36:16	07:46:11	08:01:05	08:19:17	08:44:37	09:04:58	09:21:05	09:32:17	09:42:01	09:46:41	09:52:45	09:58:15
Route 1	Southbound	Pedestrian Crossing	07:06:30	07:11:45	07:16:50	07:20:55	07:25:52	07:30:17	07:36:30	07:46:25	08:01:18	08:19:34	08:44:51	09:05:16	09:21:22	09:32:37	09:42:15	09:46:56	09:52:59	09:58:32
Route 1	Southbound	A22 Sliproad	07:06:39	07:11:54	07:16:57	07:21:03	07:26:00	07:30:27	07:36:52	07:46:36	08:01:27	08:19:44	08:44:59	09:05:27	09:21:33	09:32:48	09:42:22	09:47:06	09:53:08	09:58:42

Route	Direction	Timing Point	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)
Route 2	Northbound	London Road slip	07:06:54	07:12:09	07:17:12	07:21:18	07:26:15	07:30:41	07:37:02	07:46:47	08:01:41	08:19:56	08:45:13	09:05:40	09:21:46	09:33:00	09:42:37	09:47:18	09:53:22	09:58:57
Route 2	Northbound	Pedestrian Crossing	07:08:05	07:13:57	07:17:58	07:22:02	07:26:55	07:31:26	07:37:29	07:47:28	08:02:21	08:20:50	08:45:55	09:06:23	09:22:30	09:33:42	09:43:22	09:47:59	09:54:13	09:59:35
Route 2	Northbound	Pedestrian Crossing	07:09:11	07:14:27	07:18:33	07:22:30	07:27:29	07:32:10	07:37:58	07:48:21	08:02:50	08:21:31	08:46:45	09:06:55	09:23:13	09:34:16	09:43:52	09:48:35	09:54:53	10:00:01
Route 2	Northbound	Lingfield Road roundabout	07:09:27	07:14:37	07:18:50	07:22:42	07:27:51	07:32:22	07:38:08	07:48:33	08:03:02	08:21:45	08:46:57	09:07:12	09:23:25	09:34:30	09:44:05	09:48:52	09:55:07	10:00:10

Route	Direction	Timing Point	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)
Route 1	Southbound	Lingfield Road roundabout	15:01:08	15:09:50	15:35:47	15:59:21	16:16:59	16:30:16	16:49:23	17:04:59	17:22:54	17:38:30	17:52:08	18:02:41	18:14:03	18:22:40	18:32:40	18:42:00	18:50:13	18:58:33
Route 1	Southbound	Pedestrian Crossing	15:01:27	15:10:49	15:36:37	16:00:13	16:17:27	16:30:52	16:49:45	17:05:48	17:23:25	17:38:58	17:52:41	18:03:07	18:14:46	18:23:39	18:33:20	18:42:34	18:50:57	18:59:04
Route 1	Southbound	Pedestrian Crossing	15:02:11	15:11:21	15:37:39	16:00:48	16:17:55	16:31:43	16:50:23	17:06:35	17:24:13	17:40:01	17:53:18	18:03:46	18:15:37	18:24:15	18:34:12	18:43:05	18:51:28	18:59:53
Route 1	Southbound	Pedestrian Crossing	15:02:26	15:11:35	15:37:59	16:01:04	16:18:12	16:31:56	16:50:38	17:07:03	17:24:28	17:40:19	17:53:32	18:04:02	18:15:54	18:24:23	18:34:24	18:43:19	18:51:46	19:00:11
Route 1	Southbound	A22 Sliproad	15:02:35	15:11:45	15:38:07	16:01:12	16:18:23	16:32:04	16:50:46	17:07:16	17:24:36	17:40:29	17:53:43	18:04:10	18:16:02	18:24:33	18:34:33	18:43:28	18:51:58	19:00:20

Route	Direction	Timing Point	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)
Route 2	Northbound	London Road slip	15:02:49	15:11:59	15:38:25	16:01:31	16:18:38	16:32:23	16:51:04	17:07:31	17:24:51	17:40:43	17:53:58	18:04:23	18:16:16	18:24:54	18:34:48	18:43:40	18:52:15	19:00:35
Route 2	Northbound	Pedestrian Crossing	15:04:28	15:14:12	15:41:36	16:04:41	16:19:49	16:34:33	16:52:19	17:08:16	17:26:51	17:42:18	17:54:48	18:05:51	18:17:00	18:25:50	18:35:33	18:44:15	18:52:58	19:01:19
Route 2	Northbound	Pedestrian Crossing	15:05:13	15:15:37	15:43:06	16:05:51	16:20:50	16:35:27	16:53:06	17:09:13	17:28:08	17:43:22	17:55:52	18:06:54	18:17:28	18:26:34	18:36:14	18:44:49	18:53:44	19:01:51
Route 2	Northbound	Lingfield Road roundabout	15:05:23	15:15:51	15:43:17	16:06:31	16:21:05	16:35:46	16:53:28	17:09:31	17:28:19	17:43:28	17:56:04	18:07:05	18:17:37	18:26:46	18:36:25	18:45:03	18:53:55	19:02:03

advanced transport research

Job Number & Name: 6649 East Grinstead

Site Number/Name: East Grinstead

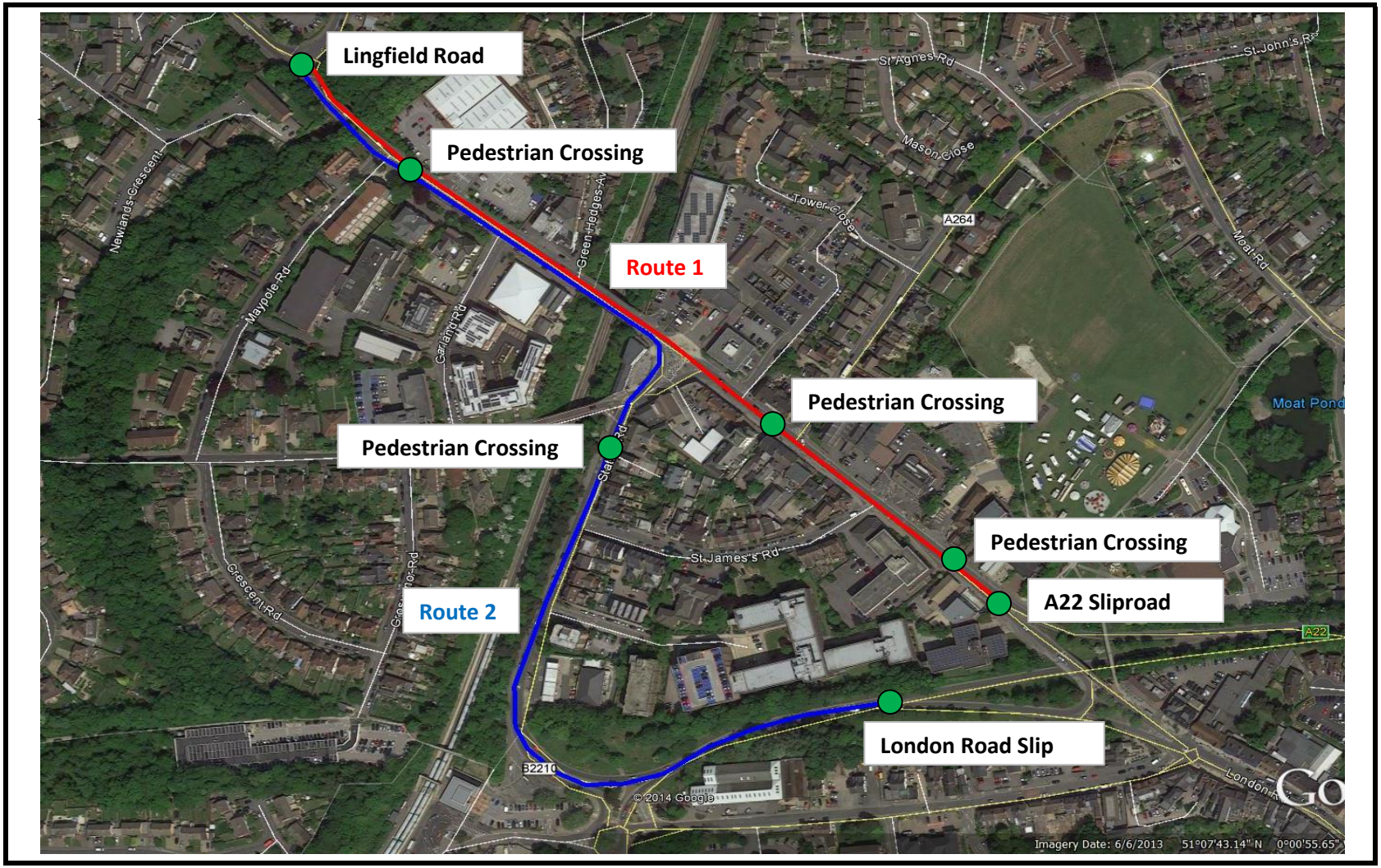
Client: Jubb UK

Date: 05/11/2014

Weather: Cloudy, Dry

Comments: None

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
East Grinstead	*Client:*	**Jubb UK**
Site Plan	*Date:*	**Wednesday 05 Nov 2014**



Advanced Transport Research

East Grinstead

Bus Journey Times

Job Number & Name: **6649 East Grinstead**

Client: **Jubb UK**

Date: **Wednesday 05 November 2014**

Route	Direction	Timing Point	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)
Route 1	Southbound	Lingfield Road roundabout	07:00:39	07:04:20	07:08:10	07:13:11	07:17:43	07:21:37	07:25:24	07:28:27	07:31:53	07:38:18	07:47:27	08:03:00	08:26:30	08:56:18	09:20:54	09:34:52	09:45:56	09:55:54
Route 1	Southbound	Pedestrian Crossing	07:00:53	07:04:34	07:08:24	07:13:25	07:17:57	07:21:56	07:25:53	07:29:20	07:32:12	07:38:32	07:47:51	08:03:22	08:27:17	08:56:49	09:21:22	09:35:31	09:46:17	09:56:28
Route 1	Southbound	Pedestrian Crossing	07:01:22	07:05:02	07:08:48	07:13:56	07:18:25	07:22:23	07:26:21	07:29:32	07:32:41	07:39:14	07:48:43	08:04:09	08:27:47	08:57:33	09:22:11	09:36:06	09:46:52	09:57:19
Route 1	Southbound	Pedestrian Crossing	07:01:37	07:05:17	07:09:02	07:14:10	07:18:37	07:22:39	07:26:36	07:29:43	07:32:55	07:39:27	07:49:00	08:04:25	08:28:08	08:57:49	09:22:27	09:36:22	09:47:08	09:57:48
Route 1	Southbound	A22 Sliproad	07:01:46	07:05:26	07:09:11	07:14:17	07:18:45	07:22:50	07:26:45	07:29:43	07:33:04	07:39:37	07:49:09	08:04:37	08:28:18	08:57:59	09:22:36	09:36:27	09:47:16	09:58:00

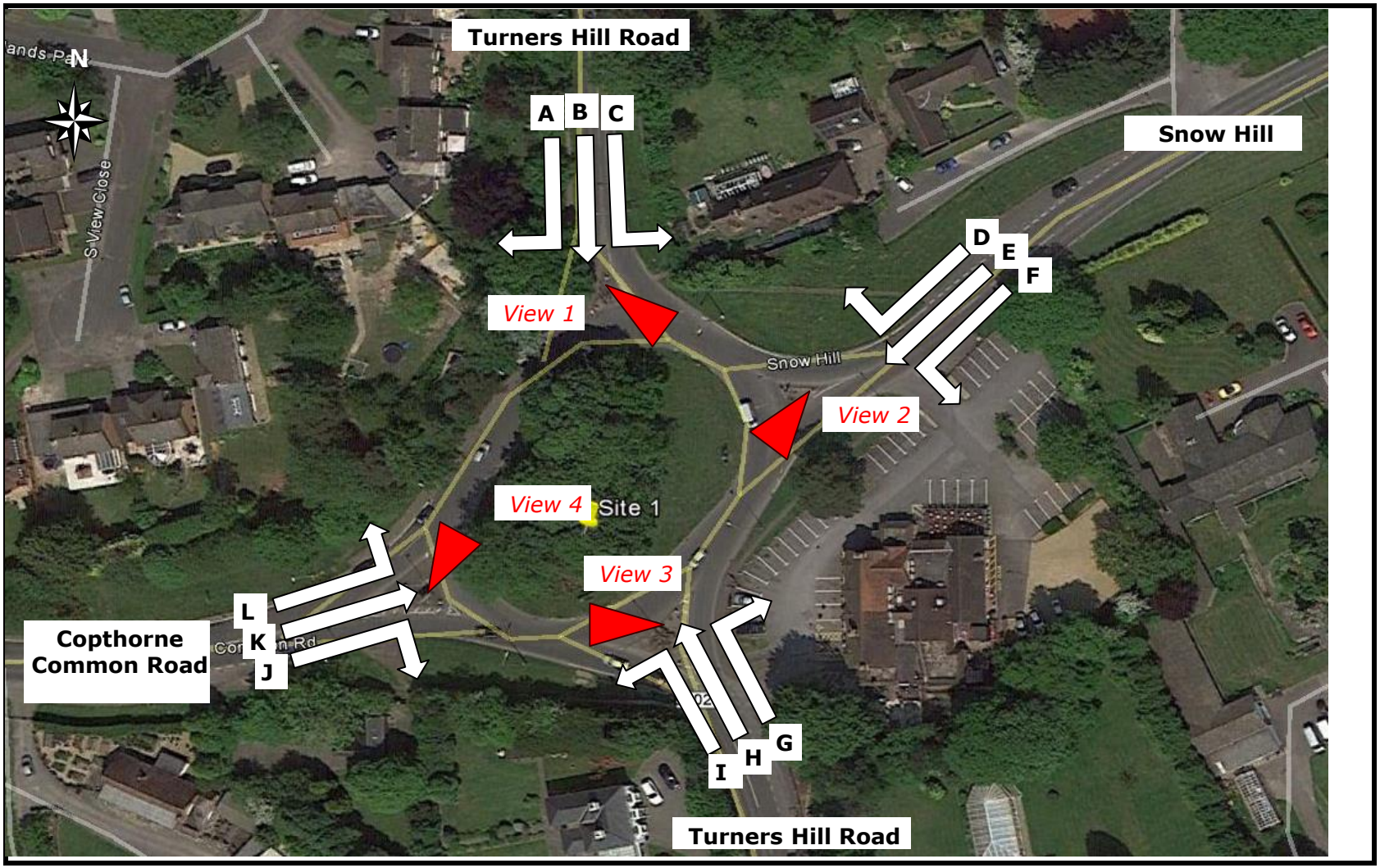
Route	Direction	Timing Point	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)
Route 2	Northbound	London Road slip	07:02:02	07:05:39	07:09:24	07:14:32	07:19:00	07:23:01	07:26:59	07:29:56	07:33:17	07:39:50	07:49:23	08:04:51	08:28:32	08:58:15	09:22:50	09:36:43	09:47:13	09:58:15
Route 2	Northbound	Pedestrian Crossing	07:02:42	07:06:21	07:10:34	07:15:31	07:19:38	07:23:49	07:27:39	07:30:36	07:34:31	07:40:18	07:50:34	08:06:01	08:29:32	09:00:00	09:23:30	09:37:22	09:48:09	09:58:52
Route 2	Northbound	Pedestrian Crossing	07:03:28	07:06:54	07:11:10	07:16:04	07:20:23	07:24:24	07:28:11	07:31:07	07:35:11	07:41:50	07:51:21	08:06:51	08:30:28	09:00:09	09:24:00	09:37:57	09:48:42	09:59:30
Route 2	Northbound	Lingfield Road roundabout	07:03:39	07:07:03	07:11:25	07:16:12	07:20:34	07:24:36	07:28:21	07:31:17	07:35:21	07:42:51	07:52:43	08:07:03	08:30:44	09:01:22	09:24:08	09:38:11	09:48:53	09:59:46

Route	Direction	Timing Point	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)
Route 1	Southbound	Lingfield Road roundabout	15:00:54	15:12:29	15:25:29	15:44:44	15:57:17	16:06:34	16:16:15	16:27:17	16:38:13	16:49:45	16:59:07	17:09:44	17:25:34	17:39:59	17:52:05	18:03:39	18:13:33	18:22:12	18:32:25	18:42:20	18:50:07	18:56:48
Route 1	Southbound	Pedestrian Crossing	15:01:28	15:12:46	15:26:19	15:45:15	15:57:43	16:07:12	16:16:48	16:28:02	16:38:44	16:50:21	16:59:40	17:10:44	17:26:02	17:40:42	17:52:34	18:04:20	18:13:55	18:22:54	18:32:52	18:43:10	18:50:44	18:57:10
Route 1	Southbound	Pedestrian Crossing	15:02:16	15:13:30	15:27:01	15:46:19	15:58:47	16:08:07	16:17:41	16:28:43	16:39:39	16:51:44	17:00:24	17:11:29	17:26:53	17:41:38	17:53:08	18:05:02	18:14:37	18:23:41	18:33:33	18:43:46	18:51:24	18:57:48
Route 1	Southbound	Pedestrian Crossing	15:02:31	15:13:51	15:27:27	15:46:37	15:59:05	16:08:22	16:17:58	16:28:58	16:39:54	16:52:02	17:00:47	17:11:57	17:27:07	17:41:57	17:53:24	18:05:16	18:14:53	18:23:54	18:33:51	18:44:01	18:51:39	18:58:03
Route 1	Southbound	A22 Sliproad	15:02:40	15:14:00	15:27:40	15:46:46	15:59:16	16:08:33	16:18:08	16:29:07	16:40:04	16:52:13	17:01:00	17:12:10	17:27:15	17:42:08	17:53:33	18:05:25	18:15:01	18:24:05	18:33:59	18:44:09	18:51:51	18:58:12

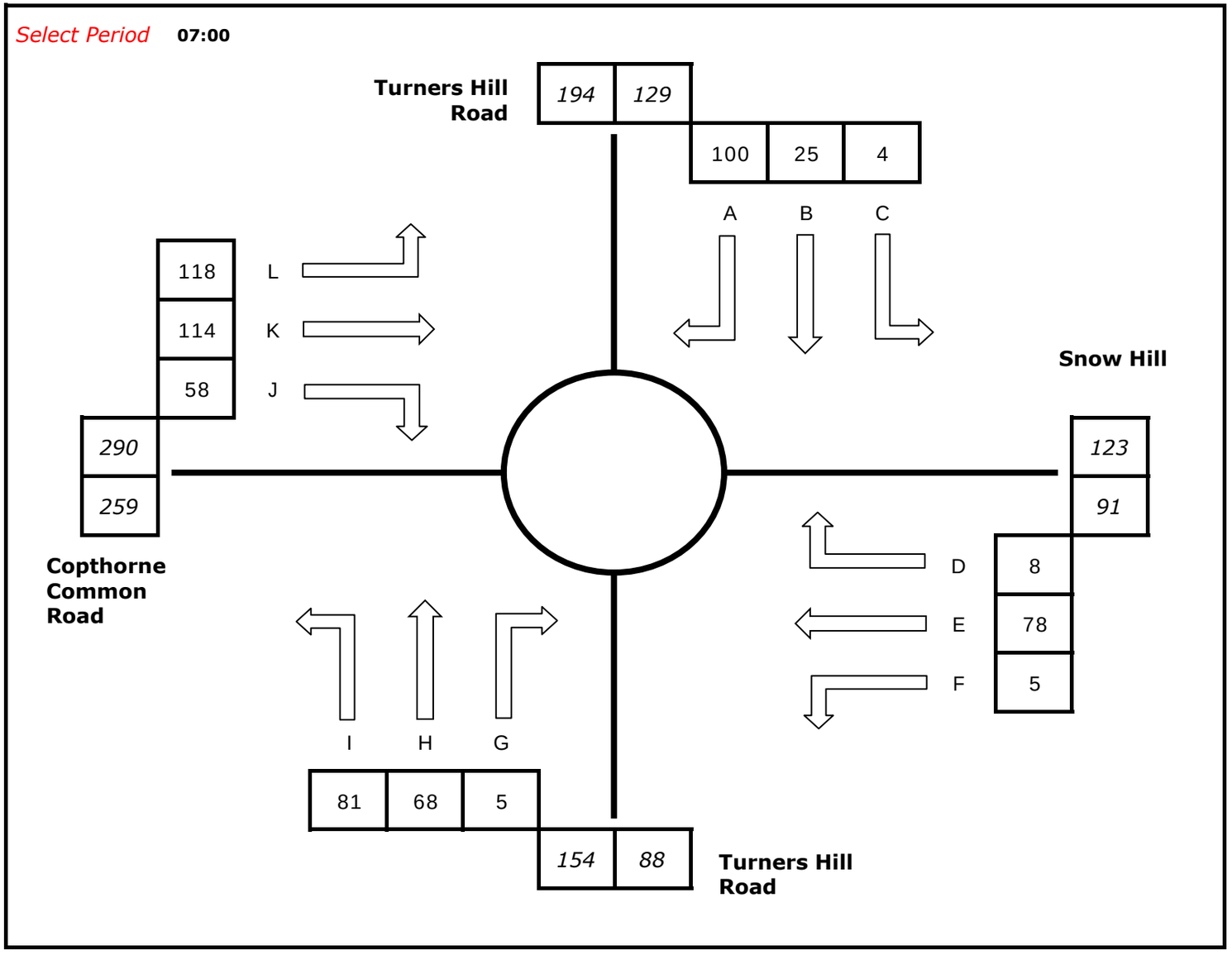
Route	Direction	Timing Point	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)	Times (hh:mm:ss)
Route 2	Northbound	London Road slip	15:02:54	15:14:14	15:27:53	15:47:01	15:59:30	16:08:46	16:18:22	16:29:21	16:40:16	16:52:26	17:01:13	17:12:24	17:27:21	17:42:22	17:53:47	18:05:40	18:15:15	18:24:18	18:34:12	18:44:24	18:52:06	18:58:25
Route 2	Northbound	Pedestrian Crossing	15:04:47	15:16:14	15:29:50	15:49:53	16:00:26	16:10:14	16:20:37	16:30:14	16:40:54	16:53:15	17:02:03	17:14:42	17:30:41	17:44:12	17:55:34	18:06:36	18:16:00	18:25:05	18:34:51	18:45:15	18:52:45	18:59:09
Route 2	Northbound	Pedestrian Crossing	15:05:47	15:17:23	15:30:49	15:50:48	16:01:16	16:11:17	16:21:19	16:30:54	16:42:03	16:54:21	17:03:14	17:15:35	17:31:56	17:45:16	17:56:30	18:07:39	18:16:27	18:25:35	18:35:31	18:45:47	18:53:11	18:59:58
Route 2	Northbound	Lingfield Road roundabout	15:06:06	15:17:40	15:31:03	15:51:03	16:01:27	16:11:29	16:21:37	16:31:04	16:42:16	16:54:35	17:03:37	17:15:54	17:32:20	17:45:33	17:56:46	18:07:53	18:16:37	18:25:47	18:35:40	18:45:49	18:53:21	19:00:10

Job Number & Name:	6649 East Grinstead
Site Number/Name:	Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road
Client:	Jubb UK
Date:	04/11/2014
Weather:	Cloudy, Wet
Comments:	None

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 1 - A264 Copthrone Common Road/B2028 Turners H	*Client:*	**Jubb UK**
Site Plan	*Date:*	**Tuesday 04 Nov 2014**



Advanced Transport Research	Job Number & Name:	6649 East Grinstead
Site 1 - A264 Copthrone Common Road/B2028 Turners Hill F	Client:	Jubb UK
Flow Diagram	Date:	Tuesday 04 Nov 2014



Advanced Transport Research

Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road

Classified Counts

Job Number & Name:	**6649 East Grinstead**
Client:	**Jubb UK**
Date:	**Tuesday 04 November 2014**

	Movement A							Movement B							Movement C						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	77	13	7	2	0	0	1	11	12	0	1	1	0	0	2	2	0	0	0	0	0
07:15 - 07:30	94	13	1	3	0	1	0	16	9	2	0	0	0	0	3	0	0	0	0	0	0
07:30 - 07:45	97	15	5	0	0	0	0	32	11	2	0	0	0	0	3	0	0	0	0	0	0
07:45 - 08:00	110	22	1	1	0	1	0	26	9	0	1	0	0	0	4	0	0	0	0	0	0
Hourly Total	**378**	**63**	**14**	**6**	**0**	**2**	**1**	**85**	**41**	**4**	**2**	**1**	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**0**	**0**
08:00 - 08:15	118	14	3	1	1	0	0	40	9	3	1	0	0	0	3	0	0	0	1	0	0
08:15 - 08:30	108	19	10	3	0	0	0	42	3	0	0	0	0	0	17	3	0	0	0	0	0
08:30 - 08:45	98	11	1	0	0	0	0	46	17	5	0	0	1	0	12	2	0	0	0	0	0
08:45 - 09:00	79	12	3	3	0	0	0	42	10	2	1	0	1	0	14	3	0	0	0	0	0
Hourly Total	**403**	**56**	**17**	**7**	**1**	**0**	**0**	**170**	**39**	**10**	**2**	**0**	**2**	**0**	**46**	**8**	**0**	**0**	**1**	**0**	**0**
09:00 - 09:15	97	17	5	3	1	0	0	46	10	0	1	0	0	0	20	4	0	0	1	0	0
09:15 - 09:30	72	10	5	1	1	0	0	39	8	2	2	0	0	1	27	3	1	1	0	0	0
09:30 - 09:45	78	13	6	4	0	1	0	39	7	2	4	0	2	0	26	7	0	0	0	0	0
09:45 - 10:00	75	8	5	3	0	0	0	31	4	2	9	0	0	0	24	5	3	0	1	0	0
Hourly Total	**322**	**48**	**21**	**11**	**2**	**1**	**0**	**155**	**29**	**6**	**16**	**0**	**2**	**1**	**97**	**19**	**4**	**1**	**2**	**0**	**0**

Advanced Transport Research

Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road

Classified Counts

Job Number & Name:	**6649 East Grinstead**
Client:	**Jubb UK**
Date:	**Tuesday 04 November 2014**

	Movement D							Movement E							Movement F						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	3	0	1	0	4	0	0	63	10	1	0	3	1	0	4	0	0	0	1	0	0
07:15 - 07:30	2	0	0	0	0	0	0	122	16	5	0	5	1	0	5	1	2	0	0	0	0
07:30 - 07:45	0	0	0	0	2	0	0	117	11	0	2	2	0	0	1	1	3	0	0	0	0
07:45 - 08:00	5	0	0	0	0	0	0	122	14	4	1	1	2	0	4	0	0	0	0	0	0
Hourly Total	**10**	**0**	**1**	**0**	**6**	**0**	**0**	**424**	**51**	**10**	**3**	**11**	**4**	**0**	**14**	**2**	**5**	**0**	**1**	**0**	**0**
08:00 - 08:15	4	1	0	0	0	0	0	93	8	4	5	1	1	0	2	1	0	0	0	0	0
08:15 - 08:30	5	0	0	0	0	0	0	116	5	5	0	1	3	0	4	1	0	0	0	0	0
08:30 - 08:45	10	3	1	0	0	0	0	101	12	1	1	2	2	0	4	2	1	0	0	0	0
08:45 - 09:00	23	4	4	0	0	0	0	82	10	3	1	5	2	0	4	1	0	0	0	0	0
Hourly Total	**42**	**8**	**5**	**0**	**0**	**0**	**0**	**392**	**35**	**13**	**7**	**9**	**8**	**0**	**14**	**5**	**1**	**0**	**0**	**0**	**0**
09:00 - 09:15	12	3	0	0	0	0	0	81	14	14	3	3	1	0	3	1	1	0	0	0	0
09:15 - 09:30	9	3	1	0	1	0	0	110	18	12	2	2	2	0	6	0	0	0	0	0	0
09:30 - 09:45	8	2	0	1	0	0	0	118	17	4	3	2	0	0	3	2	0	0	0	0	0
09:45 - 10:00	13	5	0	0	0	0	0	91	13	12	5	2	0	0	2	2	1	1	0	2	0
Hourly Total	**42**	**13**	**1**	**1**	**1**	**0**	**0**	**400**	**62**	**42**	**13**	**9**	**3**	**0**	**14**	**5**	**2**	**1**	**0**	**2**	**0**

Advanced Transport Research

Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road

Classified Counts

Job Number & Name:	**6649 East Grinstead**
Client:	**Jubb UK**
Date:	**Tuesday 04 November 2014**

	Movement G							Movement H							Movement I						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	5	0	0	0	0	0	0	56	8	1	1	1	1	0	69	9	2	0	1	0	0
07:15 - 07:30	5	0	0	0	0	0	0	68	7	3	2	0	0	0	64	8	4	1	0	0	0
07:30 - 07:45	6	4	0	0	0	0	0	73	4	4	1	1	0	0	76	3	4	1	1	0	0
07:45 - 08:00	2	1	0	0	0	0	0	72	11	0	1	0	1	0	54	11	1	1	1	1	0
Hourly Total	**18**	**5**	**0**	**0**	**0**	**0**	**0**	**269**	**30**	**8**	**5**	**2**	**2**	**0**	**263**	**31**	**11**	**3**	**3**	**1**	**0**
08:00 - 08:15	0	0	2	2	0	0	0	67	7	1	1	0	0	0	71	3	2	1	1	0	0
08:15 - 08:30	4	0	0	0	1	0	0	59	10	0	2	0	0	0	66	7	2	6	0	0	0
08:30 - 08:45	6	2	0	0	0	0	0	62	3	2	1	1	0	0	73	8	2	1	1	0	0
08:45 - 09:00	4	0	0	0	0	0	0	64	5	1	1	0	0	0	63	5	2	3	1	1	0
Hourly Total	**14**	**2**	**2**	**2**	**1**	**0**	**0**	**252**	**25**	**4**	**5**	**1**	**0**	**0**	**273**	**23**	**8**	**11**	**3**	**1**	**0**
09:00 - 09:15	4	0	2	0	0	0	0	31	6	6	0	0	0	0	55	4	3	1	0	1	0
09:15 - 09:30	7	1	0	0	0	0	0	71	1	3	1	0	0	0	81	9	5	2	0	1	0
09:30 - 09:45	4	0	0	0	0	0	0	44	2	1	2	0	0	0	69	5	0	0	2	0	0
09:45 - 10:00	6	1	0	0	0	0	0	27	3	2	0	0	0	0	40	11	6	0	0	0	0
Hourly Total	**21**	**2**	**2**	**0**	**0**	**0**	**0**	**173**	**12**	**12**	**3**	**0**	**0**	**0**	**245**	**29**	**14**	**3**	**2**	**2**	**0**

Advanced Transport Research

Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road

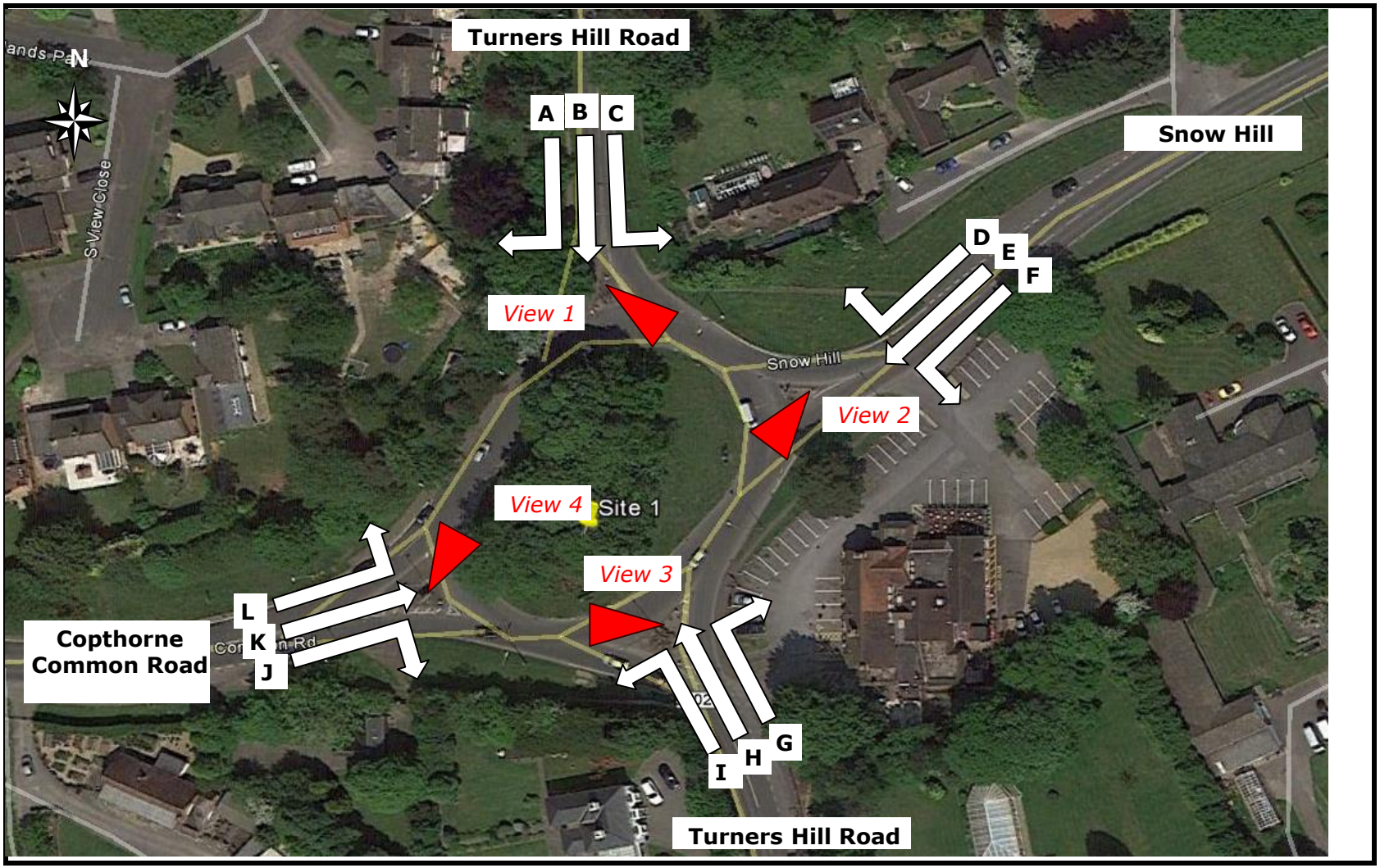
Classified Counts

Job Number & Name:	**6649 East Grinstead**
Client:	**Jubb UK**
Date:	**Tuesday 04 November 2014**

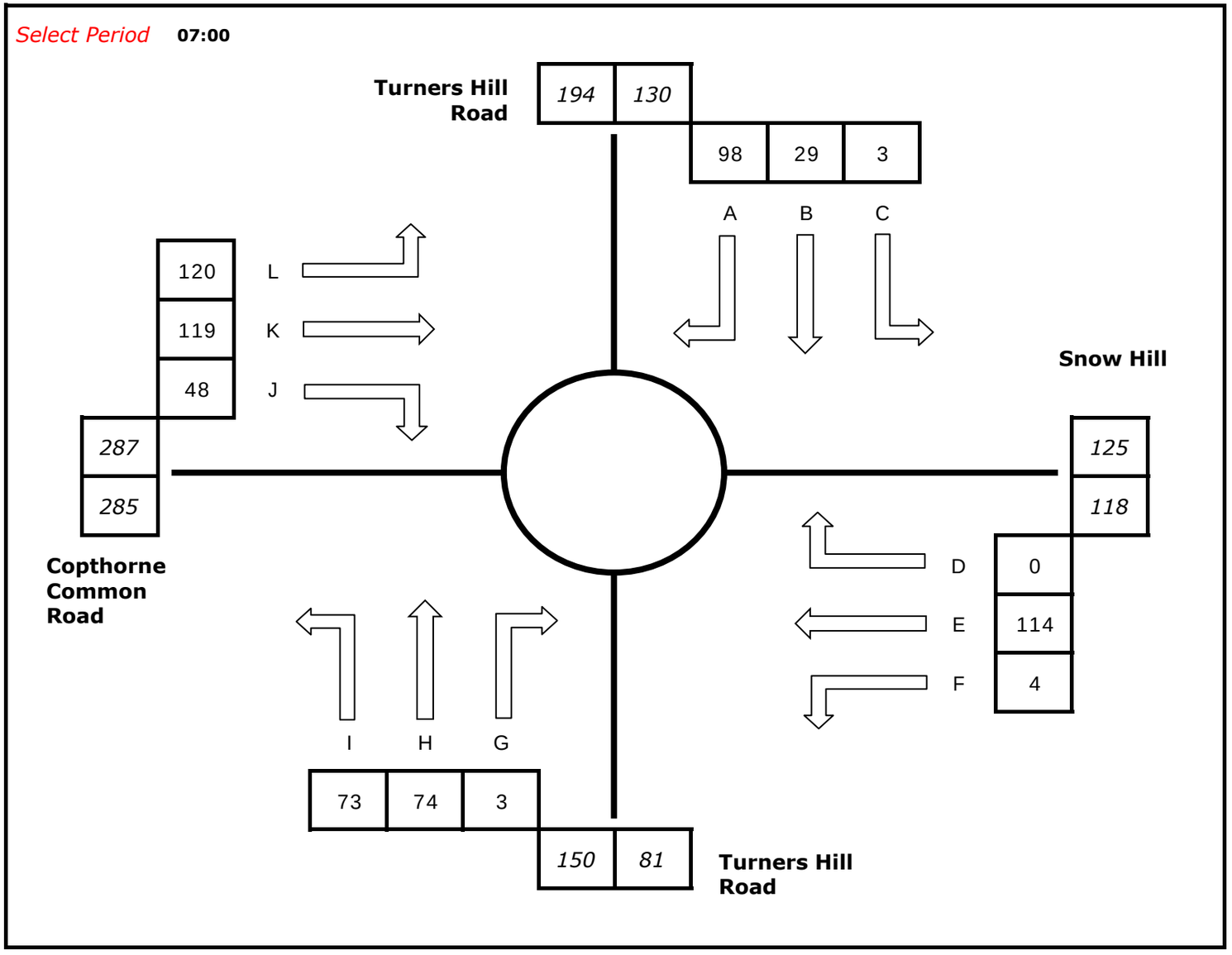
	Movement J							Movement K							Movement L						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	43	9	2	1	3	0	0	79	26	5	0	4	0	0	93	20	2	1	2	0	0
07:15 - 07:30	31	11	1	2	1	0	0	113	16	3	2	3	0	1	93	26	7	2	0	1	0
07:30 - 07:45	56	18	3	1	3	0	0	119	20	4	2	1	0	0	95	20	7	0	3	0	0
07:45 - 08:00	51	20	1	1	4	0	0	98	19	3	0	2	1	0	129	15	3	2	0	1	0
Hourly Total	**181**	**58**	**7**	**5**	**11**	**0**	**0**	**409**	**81**	**15**	**4**	**10**	**1**	**1**	**410**	**81**	**19**	**5**	**5**	**2**	**0**
08:00 - 08:15	58	10	4	1	0	0	0	74	9	4	1	2	0	0	142	16	2	1	0	1	0
08:15 - 08:30	59	19	6	2	0	0	0	70	13	4	1	2	3	0	101	11	6	2	0	2	0
08:30 - 08:45	84	17	5	1	1	0	0	69	16	7	1	1	1	2	96	18	3	2	0	1	0
08:45 - 09:00	81	22	8	3	0	0	0	72	18	7	2	1	0	0	78	13	5	2	0	0	0
Hourly Total	**282**	**68**	**23**	**7**	**1**	**0**	**0**	**285**	**56**	**22**	**5**	**6**	**4**	**2**	**417**	**58**	**16**	**7**	**0**	**4**	**0**
09:00 - 09:15	60	11	4	1	1	0	0	69	12	3	2	1	0	0	70	18	4	0	0	1	0
09:15 - 09:30	59	16	0	1	0	0	0	74	15	6	2	0	0	0	48	10	3	2	0	0	0
09:30 - 09:45	62	9	4	2	1	0	0	62	18	2	3	2	0	0	54	14	7	4	0	0	0
09:45 - 10:00	62	10	3	2	0	0	0	64	10	2	3	2	1	0	55	9	2	2	1	0	1
Hourly Total	**243**	**46**	**11**	**6**	**2**	**0**	**0**	**269**	**55**	**13**	**10**	**5**	**1**	**0**	**227**	**51**	**16**	**8**	**1**	**1**	**1**

Job Number & Name:	6649 East Grinstead
Site Number/Name:	Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road
Client:	Jubb UK
Date:	05/11/2014
Weather:	Cloudy, Dry
Comments:	None

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 1 - A264 Copthrone Common Road/B2028 Turners H	*Client:*	**Jubb UK**
Site Plan	*Date:*	**Wednesday 05 Nov 2014**



Advanced Transport Research	Job Number & Name:	6649 East Grinstead
Site 1 - A264 Copthrone Common Road/B2028 Turners Hill F	Client:	Jubb UK
Flow Diagram	Date:	Wednesday 05 Nov 2014



Advanced Transport Research

Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road

Classified Counts

Job Number & Name:	**6649 East Grinstead**
Client:	**Jubb UK**
Date:	**Wednesday 05 November 2014**

	Movement A							Movement B							Movement C						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	77	12	7	2	0	0	0	17	7	2	1	1	0	1	2	1	0	0	0	0	0
07:15 - 07:30	75	17	4	5	0	0	0	39	11	1	3	0	1	0	2	0	0	0	0	0	0
07:30 - 07:45	89	17	4	0	0	0	0	53	14	3	0	0	0	0	1	0	0	0	0	0	0
07:45 - 08:00	93	13	0	2	0	1	0	50	9	3	1	0	0	0	5	0	2	0	0	0	0
Hourly Total	**334**	**59**	**15**	**9**	**0**	**1**	**0**	**159**	**41**	**9**	**5**	**1**	**1**	**1**	**10**	**1**	**2**	**0**	**0**	**0**	**0**
08:00 - 08:15	87	12	2	0	0	0	0	69	14	4	1	1	0	0	2	1	0	0	0	0	0
08:15 - 08:30	86	10	3	1	0	0	0	54	7	2	0	0	0	0	3	1	0	0	1	0	0
08:30 - 08:45	75	13	1	1	0	0	0	61	8	5	2	0	1	0	3	0	0	0	0	0	0
08:45 - 09:00	85	10	6	0	2	0	0	79	13	3	1	0	1	0	2	2	0	0	0	0	0
Hourly Total	**333**	**45**	**12**	**2**	**2**	**0**	**0**	**263**	**42**	**14**	**4**	**1**	**2**	**0**	**10**	**4**	**0**	**0**	**1**	**0**	**0**
09:00 - 09:15	78	10	5	3	0	0	0	53	4	2	1	0	0	0	1	1	0	0	2	0	0
09:15 - 09:30	69	11	4	1	0	0	0	50	8	3	2	0	2	0	4	1	0	0	0	0	0
09:30 - 09:45	67	9	5	1	0	0	0	50	9	3	2	0	2	0	7	3	1	0	0	0	0
09:45 - 10:00	65	11	3	1	0	0	0	44	6	2	1	0	1	0	6	1	0	0	0	0	0
Hourly Total	**279**	**41**	**17**	**6**	**0**	**0**	**0**	**197**	**27**	**10**	**6**	**0**	**5**	**0**	**18**	**6**	**1**	**0**	**2**	**0**	**0**

Advanced Transport Research

Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road

Classified Counts

Job Number & Name:	**6649 East Grinstead**
Client:	**Jubb UK**
Date:	**Wednesday 05 November 2014**

	Movement D							Movement E							Movement F						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	0	0	0	0	0	0	0	87	15	5	0	6	1	0	4	0	0	0	0	0	0
07:15 - 07:30	0	0	0	0	0	0	0	109	7	2	0	5	2	0	3	2	2	0	0	0	0
07:30 - 07:45	2	0	0	0	0	0	0	115	6	3	0	2	0	0	4	1	0	0	0	0	0
07:45 - 08:00	2	0	0	0	0	0	0	113	12	4	5	2	1	0	4	1	0	0	0	0	0
Hourly Total	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**424**	**40**	**14**	**5**	**15**	**4**	**0**	**15**	**4**	**2**	**0**	**0**	**0**	**0**
08:00 - 08:15	2	0	0	0	1	0	0	104	12	1	1	0	0	0	2	1	0	0	0	0	0
08:15 - 08:30	0	0	0	0	0	0	0	101	12	9	1	1	2	0	6	5	1	0	0	0	0
08:30 - 08:45	1	0	0	0	0	0	0	97	5	8	4	3	0	0	3	1	0	0	0	0	0
08:45 - 09:00	0	0	0	0	0	0	0	85	12	10	0	3	2	0	5	4	1	0	0	0	0
Hourly Total	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**387**	**41**	**28**	**6**	**7**	**4**	**0**	**16**	**11**	**2**	**0**	**0**	**0**	**0**
09:00 - 09:15	1	2	0	0	0	0	0	97	9	11	1	1	0	0	11	0	0	0	0	0	0
09:15 - 09:30	0	0	0	0	0	0	0	86	24	6	1	4	0	0	6	0	0	0	0	0	0
09:30 - 09:45	2	0	0	0	0	0	0	88	14	5	1	3	0	0	7	2	0	0	0	0	0
09:45 - 10:00	1	0	0	0	0	0	0	97	9	6	1	1	2	0	5	2	0	0	0	0	0
Hourly Total	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**368**	**56**	**28**	**4**	**9**	**2**	**0**	**29**	**4**	**0**	**0**	**0**	**0**	**0**

Advanced Transport Research

Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road

Classified Counts

Job Number & Name:	**6649 East Grinstead**
Client:	**Jubb UK**
Date:	**Wednesday 05 November 2014**

	Movement G							Movement H							Movement I						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	3	0	0	0	0	0	0	64	8	1	0	1	0	0	60	8	4	0	1	0	0
07:15 - 07:30	5	0	0	0	0	0	0	71	9	1	2	0	0	0	75	14	5	1	0	1	0
07:30 - 07:45	2	1	0	0	0	0	0	82	12	1	0	1	0	0	77	6	2	1	1	1	0
07:45 - 08:00	1	4	1	0	0	0	0	77	7	4	2	0	2	0	54	7	1	1	3	1	0
Hourly Total	**11**	**5**	**1**	**0**	**0**	**0**	**0**	**294**	**36**	**7**	**4**	**2**	**2**	**0**	**266**	**35**	**12**	**3**	**5**	**3**	**0**
08:00 - 08:15	6	0	2	3	0	0	0	50	8	5	0	0	0	0	79	11	6	2	0	1	0
08:15 - 08:30	6	1	0	0	0	0	0	46	6	1	0	1	0	0	75	10	4	0	0	0	0
08:30 - 08:45	3	0	0	0	0	0	0	44	6	0	0	0	0	1	54	9	3	3	1	0	0
08:45 - 09:00	2	5	0	0	0	0	0	50	0	3	2	1	0	0	66	4	3	2	1	0	0
Hourly Total	**17**	**6**	**2**	**3**	**0**	**0**	**0**	**190**	**20**	**9**	**2**	**2**	**0**	**1**	**274**	**34**	**16**	**7**	**2**	**1**	**0**
09:00 - 09:15	5	2	2	0	0	0	0	62	7	3	1	0	1	0	65	5	1	2	0	0	0
09:15 - 09:30	6	1	1	0	0	0	0	32	7	3	1	0	0	0	54	2	1	1	0	0	0
09:30 - 09:45	6	0	0	0	0	0	0	38	9	4	0	0	0	0	78	9	4	1	1	0	0
09:45 - 10:00	4	4	0	0	0	0	0	40	4	2	0	0	0	0	61	5	3	1	0	0	1
Hourly Total	**21**	**7**	**3**	**0**	**0**	**0**	**0**	**172**	**27**	**12**	**2**	**0**	**1**	**0**	**258**	**21**	**9**	**5**	**1**	**0**	**1**

Advanced Transport Research

Site 1 - A264 Copthrone Common Road/B2028 Turners Hill Road

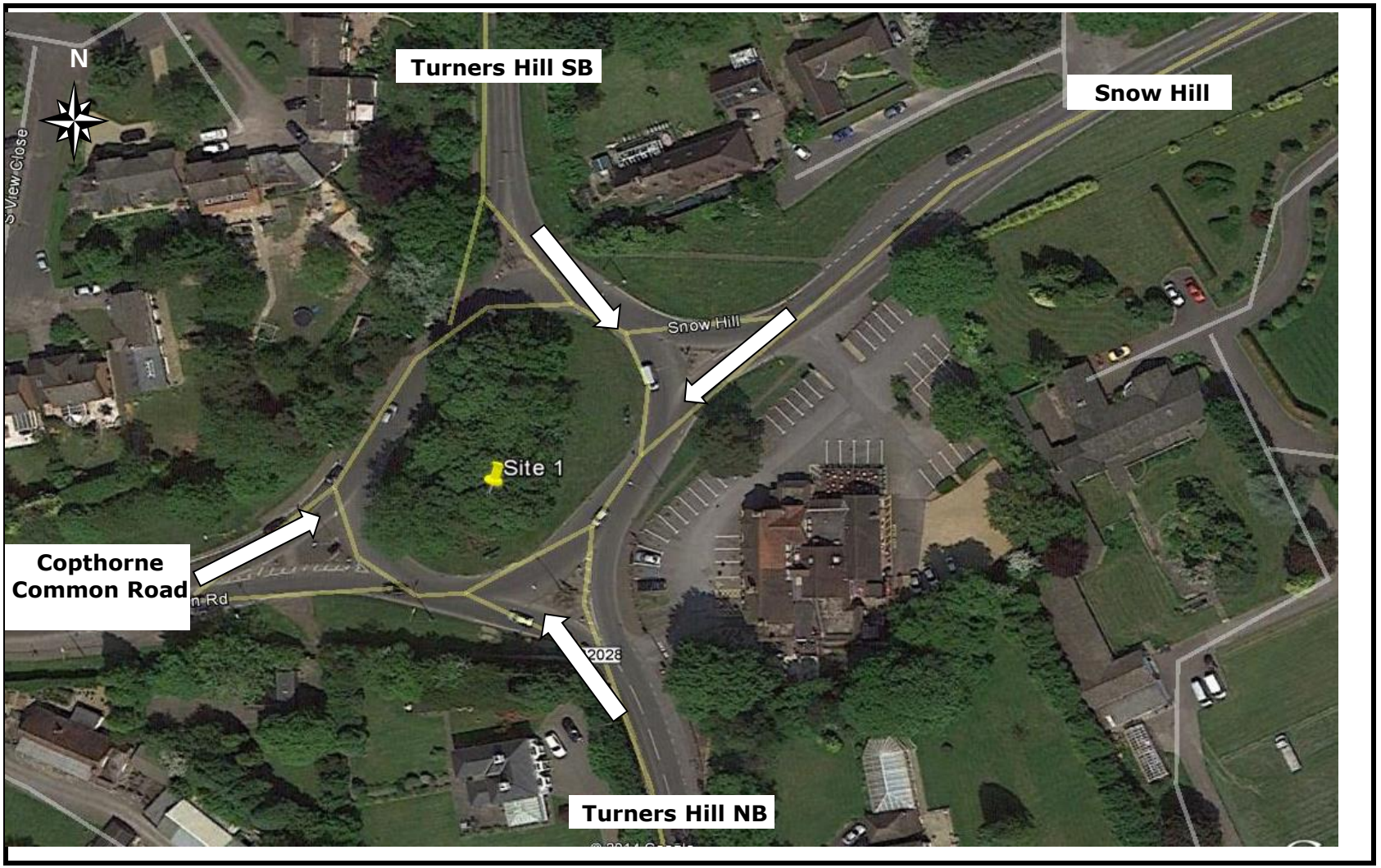
Classified Counts

Job Number & Name:	**6649 East Grinstead**
Client:	**Jubb UK**
Date:	**Wednesday 05 November 2014**

	Movement J							Movement K							Movement L						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	35	8	1	1	3	0	0	80	26	9	1	2	1	0	94	20	2	3	0	1	0
07:15 - 07:30	30	10	1	0	2	0	0	125	28	2	2	2	0	0	90	26	3	2	2	1	0
07:30 - 07:45	49	20	2	1	1	2	0	131	21	7	2	0	0	0	79	20	4	3	0	0	0
07:45 - 08:00	49	17	5	0	4	0	0	102	23	0	4	2	1	1	102	18	2	2	0	0	0
Hourly Total	**163**	**55**	**9**	**2**	**10**	**2**	**0**	**438**	**98**	**18**	**9**	**6**	**2**	**1**	**365**	**84**	**11**	**10**	**2**	**2**	**0**
08:00 - 08:15	60	16	3	1	0	0	0	75	8	7	2	3	0	0	107	16	0	0	1	0	0
08:15 - 08:30	84	20	8	1	1	0	0	80	14	3	1	2	2	2	108	17	5	0	0	0	0
08:30 - 08:45	78	17	11	1	0	0	0	93	9	8	2	0	0	0	85	22	2	0	0	1	0
08:45 - 09:00	61	15	1	2	0	1	0	87	8	3	2	2	0	0	82	16	5	0	0	0	0
Hourly Total	**283**	**68**	**23**	**5**	**1**	**1**	**0**	**335**	**39**	**21**	**7**	**7**	**2**	**2**	**382**	**71**	**12**	**0**	**1**	**1**	**0**
09:00 - 09:15	48	8	0	2	0	0	0	90	20	4	0	1	0	0	63	9	7	0	0	1	0
09:15 - 09:30	56	12	2	0	1	0	0	65	14	3	1	3	0	0	54	14	3	2	0	0	0
09:30 - 09:45	57	13	1	2	1	0	1	57	17	9	0	4	0	1	49	9	4	3	0	0	0
09:45 - 10:00	46	7	6	1	0	0	0	74	17	2	3	1	0	0	35	11	0	2	0	0	0
Hourly Total	**207**	**40**	**9**	**5**	**2**	**0**	**1**	**286**	**68**	**18**	**4**	**9**	**0**	**1**	**201**	**43**	**14**	**7**	**0**	**1**	**0**

Job Number & Name:	6649 East Grinstead
Site Number/Name:	Site 1 - A264 Copthorne Common Road/B2028 Turners Hill Road
Client:	JUBB
Date:	04/11/2014
Weather:	
Comments:	

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 1 - A264 Copthorne Common Road/B2028 Turners H	*Client:*	**JUBB**
Site Plan	*Date:*	**Tuesday 04 Nov 2014**



Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 1 - A264 Copthorne Common Road/B2028 Tur	*Client:*	**JUBB**
Queue Lengths	*Date:*	**Tuesday 04 November 2014**

	Copthorne Common Road		Turners Hill NB	Snow Hill	Turners Hill SB
Times	**Lane 1**	**Lane 2**	**Lane 1**	**Lane 1**	**Lane 1**
07:00 - 07:05	4	2	6	7	4
07:05 - 07:10	5	1	13	6	7
07:10 - 07:15	6	1	10	8	4
07:15 - 07:20	5	2	11	11	6
07:20 - 07:25	4	0	13	12	6
07:25 - 07:30	7	3	13	7	25+
07:30 - 07:35	6	2	25+	6	25+
07:35 - 07:40	8	2	25+	8	25+
07:40 - 07:45	5	0	25+	12	25+
07:45 - 07:50	3	0	25+	27	25+
07:50 - 07:55	4	2	25+	23	25+
07:55 - 08:00	5	0	25+	19	16
08:00 - 08:05	3	0	25+	23	14
08:05 - 08:10	4	2	25+	25+	18
08:10 - 08:15	6	0	25+	24	17
08:15 - 08:20	4	2	25+	25+	14
08:20 - 08:25	2	2	25+	22	18
08:25 - 08:30	3	2	25+	25+	20
08:30 - 08:35	4	2	18	20	17
08:35 - 08:40	2	2	16	25+	25+
08:40 - 08:45	3	2	25+	20	25+
08:45 - 08:50	6	3	13	25+	16
08:50 - 08:55	3	2	9	25+	25+
08:55 - 09:00	5	0	11	22	25+
09:00 - 09:05	8	3	25+	25+	25+
09:05 - 09:10	6	2	25+	25+	25+
09:10 - 09:15	9	2	16	25+	25+
09:15 - 09:20	4	0	25+	24	25+
09:20 - 09:25	3	2	18	25+	25+
09:25 - 09:30	4	0	25+	18	25+
09:30 - 09:35	3	0	25+	16	25+
09:35 - 09:40	2	0	25+	20	25+
09:40 - 09:45	4	0	16	24	25+
09:45 - 09:50	3	0	12	18	25+
09:50 - 09:55	2	0	6	16	12
09:55 - 10:00	2	0	4	15	10

Count in Vehicles

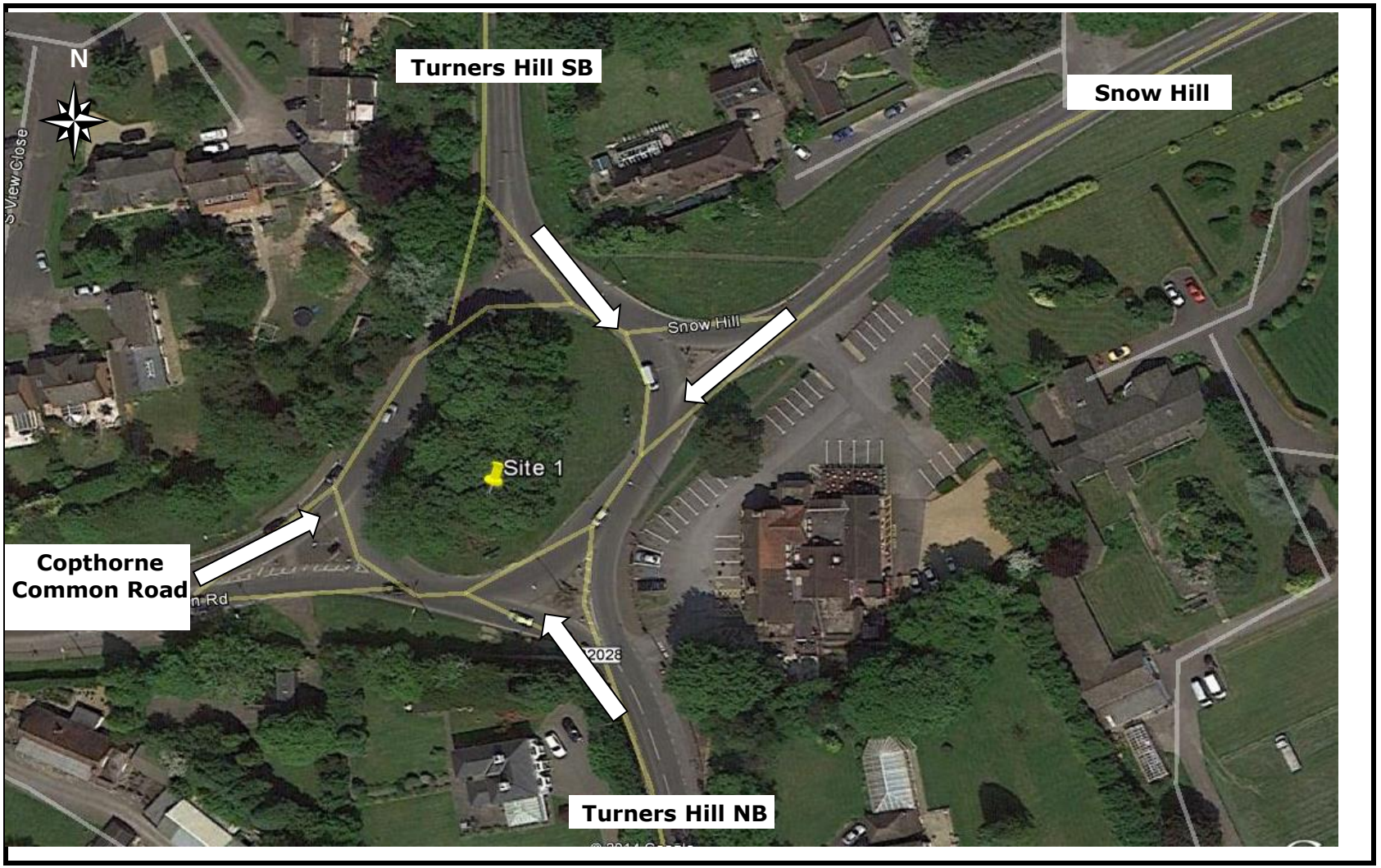
Lane 1 = Nearest Kerb

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 1 - A264 Copthorne Common Road/B2028 Tur	*Client:*	**JUBB**
Queue Lengths	*Date:*	**Tuesday 04 November 2014**

	Copthorne Common Road		Turners Hill NB	Snow Hill	Turners Hill SB
Times	**Lane 1**	**Lane 2**	**Lane 1**	**Lane 1**	**Lane 1**
15:00 - 15:05	0	0	25+	6	10
15:05 - 15:10	4	0	16	8	14
15:10 - 15:15	2	0	14	8	16
15:15 - 15:20	3	0	17	10	17
15:20 - 15:25	4	0	15	9	14
15:25 - 15:30	7	2	25+	14	12
15:30 - 15:35	4	0	25+	13	16
15:35 - 15:40	8	0	25+	16	25+
15:40 - 15:45	4	2	25+	14	25+
15:45 - 15:50	6	3	25+	10	25+
15:50 - 15:55	5	0	25+	13	21
15:55 - 16:00	4	2	25+	12	23
16:00 - 16:05	3	0	25+	16	25+
16:05 - 16:10	4	2	25+	11	25+
16:10 - 16:15	8	3	25+	22	25+
16:15 - 16:20	7	4	25+	18	25+
16:20 - 16:25	6	3	25+	17	25+
16:25 - 16:30	3	4	25+	20	25+
16:30 - 16:35	4	0	25+	19	25+
16:35 - 16:40	5	0	25+	23	25+
16:40 - 16:45	4	0	25+	24	25+
16:45 - 16:50	9	3	25+	18	25+
16:50 - 16:55	4	2	25+	19	25+
16:55 - 17:00	5	0	25+	25	25+
17:00 - 17:05	6	2	25+	20	25+
17:05 - 17:10	7	3	25+	19	25+
17:10 - 17:15	4	2	25+	22	25+
17:15 - 17:20	5	2	25+	25+	25+
17:20 - 17:25	3	0	25+	24	25+
17:25 - 17:30	2	0	25+	25+	25+
17:30 - 17:35	4	2	25+	20	25+
17:35 - 17:40	3	0	25+	18	25+
17:40 - 17:45	3	0	25+	22	25+
17:45 - 17:50	4	0	25+	17	25+
17:50 - 17:55	5	2	25+	19	25+
17:55 - 18:00	2	0	25+	20	25+

Job Number & Name:	6649 East Grinstead
Site Number/Name:	Site 1 - A264 Copthorne Common Road/B2028 Turners Hill Road
Client:	JUBB
Date:	05/11/2014
Weather:	Cloudy, Dry
Comments:	None

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 1 - A264 Copthorne Common Road/B2028 Turners H	*Client:*	**JUBB**
Site Plan	*Date:*	**Wednesday 05 Nov 2014**



Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 1 - A264 Copthorne Common Road/B2028 Tur	*Client:*	**JUBB**
Queue Lengths	*Date:*	**Wednesday 05 November 2014**

	Copthorne Common Road		Turners Hill NB		Snow Hill		Turners Hill SB	
Times	**Lane 1**	**Lane 2**	**Lane 1**		**Lane 1**		**Lane 1**	
07:00 - 07:05	6	2	4		5		8	
07:05 - 07:10	4	0	9		12		6	
07:10 - 07:15	5	0	8		6		7	
07:15 - 07:20	6	0	16		8		9	
07:20 - 07:25	4	0	14		7		12	
07:25 - 07:30	4	2	20		11		14	
07:30 - 07:35	5	0	20		25+		24	
07:35 - 07:40	9	0	21		29		24	
07:40 - 07:45	7	0	19		25+		19	
07:45 - 07:50	6	0	20		25+		18	
07:50 - 07:55	9	2	21		25+		17	
07:55 - 08:00	4	0	20		25+		20	
08:00 - 08:05	9	0	22		25+		21	
08:05 - 08:10	9	0	20		25+		21	
08:10 - 08:15	4	0	18		25+		18	
08:15 - 08:20	3	2	15		25+		14	
08:20 - 08:25	3	0	10		22		21	
08:25 - 08:30	2	0	8		24		22	
08:30 - 08:35	2	0	10		20		16	
08:35 - 08:40	0	0	7		25		14	
08:40 - 08:45	2	0	9		20		19	
08:45 - 08:50	0	0	11		18		21	
08:50 - 08:55	0	0	12		16		17	
08:55 - 09:00	0	0	8		20		18	
09:00 - 09:05	0	0	18		26		12	
09:05 - 09:10	2	0	19		12		10	
09:10 - 09:15	3	2	21		15		9	
09:15 - 09:20	3	4	16		12		11	
09:20 - 09:25	8	0	20		18		16	
09:25 - 09:30	7	0	21		14		14	
09:30 - 09:35	6	0	14		10		12	
09:35 - 09:40	2	2	12		8		10	
09:40 - 09:45	2	0	6		7		14	
09:45 - 09:50	2	0	4		8		12	
09:50 - 09:55	0	0	5		9		10	
09:55 - 10:00	0	0	3		4		9	

Count in Vehicles

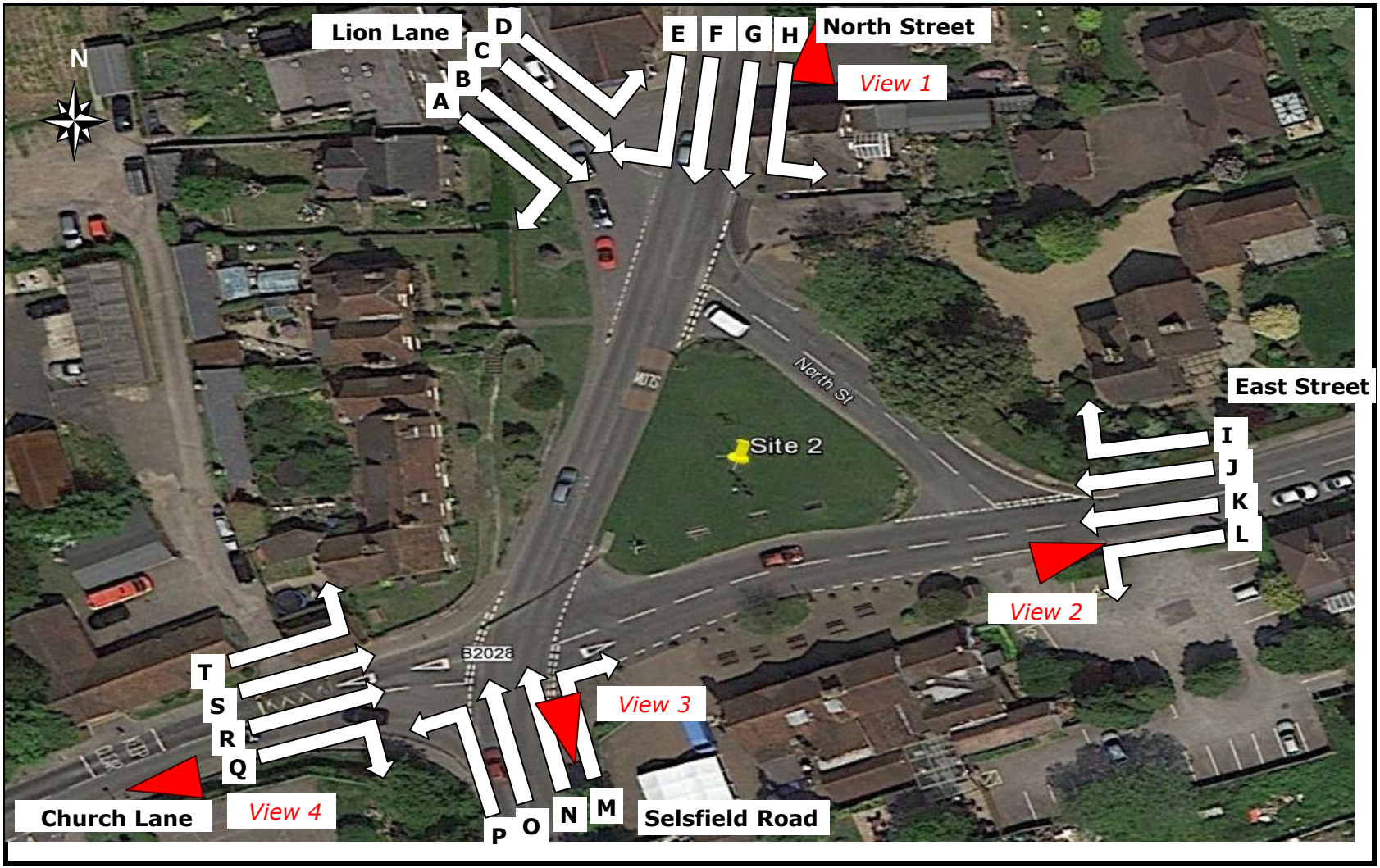
Lane 1 = Nearest Kerb

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 1 - A264 Copthorne Common Road/B2028 Tur	*Client:*	**JUBB**
Queue Lengths	*Date:*	**Wednesday 05 November 2014**

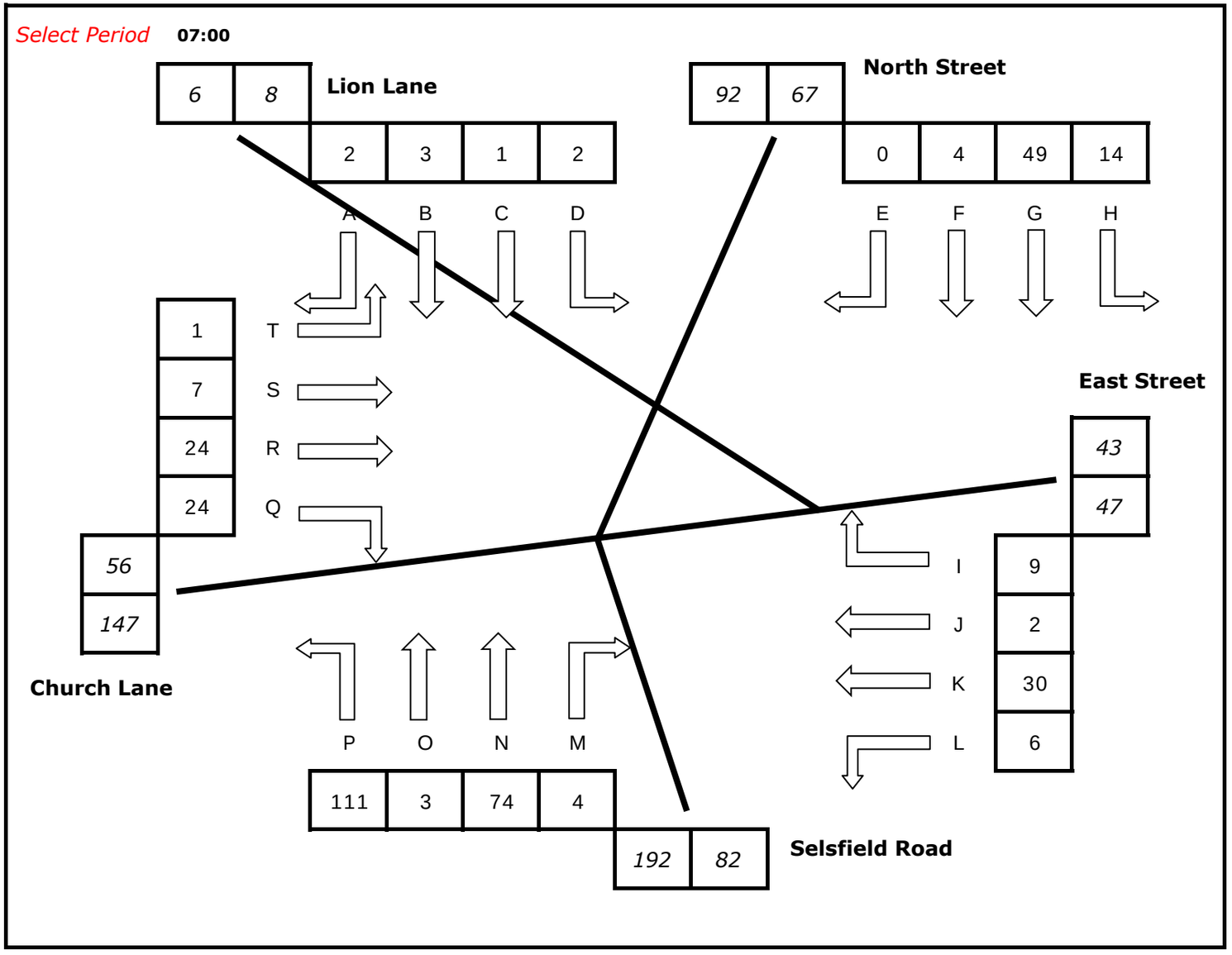
	Copthorne Common Road		Turners Hill NB		Snow Hill		Turners Hill SB	
Times	**Lane 1**	**Lane 2**	**Lane 1**		**Lane 1**		**Lane 1**	
15:00 - 15:05	2	0	9		6		10	
15:05 - 15:10	0	0	14		7		10	
15:10 - 15:15	3	0	16		8		12	
15:15 - 15:20	4	2	15		9		10	
15:20 - 15:25	2	0	17		10		8	
15:25 - 15:30	2	0	13		11		9	
15:30 - 15:35	4	0	18		12		8	
15:35 - 15:40	3	0	16		10		10	
15:40 - 15:45	0	0	14		9		16	
15:45 - 15:50	0	0	16		9		18	
15:50 - 15:55	3	0	12		7		20	
15:55 - 16:00	0	0	14		11		22	
16:00 - 16:05	0	0	12		12		14	
16:05 - 16:10	9	0	16		16		18	
16:10 - 16:15	4	0	18		12		20	
16:15 - 16:20	0	0	14		10		16	
16:20 - 16:25	0	0	12		11		17	
16:25 - 16:30	3	0	16		8		16	
16:30 - 16:35	2	0	17		10		15	
16:35 - 16:40	0	0	14		14		17	
16:40 - 16:45	2	0	15		12		18	
16:45 - 16:50	3	0	12		14		22	
16:50 - 16:55	2	0	16		15		20	
16:55 - 17:00	3	3	14		24		22	
17:00 - 17:05	2	0	12		22		19	
17:05 - 17:10	0	0	10		20		20	
17:10 - 17:15	0	0	14		18		17	
17:15 - 17:20	2	0	11		22		15	
17:20 - 17:25	3	0	11		17		14	
17:25 - 17:30	0	0	9		12		16	
17:30 - 17:35	4	0	8		16		18	
17:35 - 17:40	2	0	6		25+		19	
17:40 - 17:45	0	0	7		22		22	
17:45 - 17:50	0	0	8		24		23	
17:50 - 17:55	0	0	6		25+		22	
17:55 - 18:00	2	0	7		25+		20	

Job Number & Name:	6649 East Grinstead
Site Number/Name:	Site 2 - B2028 Selsfield Road/B2110 Church Road
Client:	JUBB
Date:	04/11/2014
Weather:	Cloudy, Wet
Comments:	None

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 2 - B2028 Selsfield Road/B2110 Church Road	*Client:*	**JUBB**
Site Plan	*Date:*	**Tuesday 04 Nov 2014**



Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 2 - B2028 Selsfield Road/B2110 Church Road	*Client:*	**JUBB**
Flow Diagram	*Date:*	**Tuesday 04 Nov 2014**



Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2110 Church Road

Classified Counts

Job Number & Name: **6649 East Grinstead**

Client: **JUBB**

Date: **Tuesday 04 November 2014**

	Movement A							Movement B							Movement C							Movement D						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0
07:15 - 07:30	3	0	0	0	0	0	0	5	0	0	0	0	0	0	2	0	0	0	0	0	0	2	1	1	0	0	0	0
07:30 - 07:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
07:45 - 08:00	0	0	1	0	0	0	0	2	1	0	0	0	0	0	1	2	0	0	0	0	0	1	1	0	0	0	0	0
Hourly Total	**7**	**1**	**1**	**0**	**0**	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**3**	**0**	**0**	**0**	**0**	**0**	**4**	**4**	**1**	**0**	**0**	**0**	**0**
08:00 - 08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0
08:15 - 08:30	1	0	0	0	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0
08:30 - 08:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
08:45 - 09:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0
Hourly Total	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**
09:00 - 09:15	0	1	0	0	0	0	0	3	1	0	0	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	0
09:15 - 09:30	3	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0
09:30 - 09:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
09:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0
Hourly Total	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**1**	**0**	**0**	**0**	**0**	**0**
15:00 - 15:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	1	0	0	0	0	0	9	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	5	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**1**	**16**	**4**	**1**	**0**	**0**	**0**	**0**
16:00 - 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
16:15 - 16:30	2	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	4	1	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0	0	6	2	0	0	0	0	0	3	2	0	0	0	0	0	3	0	0	0	0	0	0
Hourly Total	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**0**	**1**	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**9**	**1**	**0**	**0**	**0**	**0**	**0**
17:00 - 17:15	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
17:15 - 17:30	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	0
17:45 - 18:00	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
Hourly Total	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**

Advanced Transport Research
Site 2 - B2028 Selsfield Road/B2110 Church Road
Classified Counts

Job Number & Name: **6649 East Grinstead**
Client: **JUBB**
Date: **Tuesday 04 November 2014**

	Movement E							Movement F							Movement G							Movement H						
Times	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc
07:00 - 07:15	0	0	0	0	0	0	0	2	2	0	0	0	0	0	28	16	3	0	1	1	0	9	2	2	1	0	0	0
07:15 - 07:30	0	0	0	0	0	0	0	15	3	0	0	0	0	0	41	6	2	5	0	0	0	17	4	0	0	3	0	0
07:30 - 07:45	0	1	0	0	0	0	0	22	0	0	0	0	0	0	47	17	6	1	1	0	0	22	6	0	0	0	0	0
07:45 - 08:00	0	0	0	0	0	0	0	17	1	0	0	0	0	0	37	12	0	2	0	0	0	43	2	1	1	0	0	0
Hourly Total	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**56**	**6**	**0**	**0**	**0**	**0**	**0**	**153**	**51**	**11**	**8**	**2**	**1**	**0**	**91**	**14**	**3**	**2**	**3**	**0**	**0**
08:00 - 08:15	1	0	0	0	0	0	0	23	5	0	0	0	1	0	71	21	3	4	0	0	0	52	8	3	0	1	0	0
08:15 - 08:30	2	0	0	0	0	0	0	15	2	0	0	0	0	0	74	8	4	1	0	0	0	61	7	3	0	0	0	0
08:30 - 08:45	0	0	0	0	0	0	0	20	0	1	0	0	0	0	69	21	6	0	0	0	0	72	7	3	0	0	0	0
08:45 - 09:00	0	0	0	0	0	0	0	23	1	0	0	0	0	0	63	17	5	1	0	0	0	33	4	3	2	0	0	0
Hourly Total	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**81**	**8**	**1**	**0**	**0**	**1**	**0**	**277**	**67**	**18**	**6**	**0**	**0**	**0**	**218**	**26**	**12**	**2**	**1**	**0**	**0**
09:00 - 09:15	0	0	0	0	0	0	0	19	5	1	0	0	0	0	126	30	3	2	0	1	0	37	3	3	1	0	0	0
09:15 - 09:30	1	0	0	0	0	0	0	7	1	0	0	0	0	0	85	12	1	4	0	0	0	29	4	0	1	0	0	0
09:30 - 09:45	0	0	0	0	0	0	0	6	4	0	0	0	0	0	72	23	1	4	0	0	0	22	1	1	1	0	0	1
09:45 - 10:00	0	2	0	0	0	0	0	4	0	0	0	0	0	0	73	16	3	7	0	2	0	24	0	0	1	0	0	0
Hourly Total	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**36**	**10**	**1**	**0**	**0**	**0**	**0**	**356**	**81**	**8**	**17**	**0**	**3**	**0**	**112**	**8**	**4**	**4**	**0**	**0**	**1**

Advanced Transport Research
Site 2 - B2028 Selsfield Road/B2
PCU Values

	Moven			
Times	Cars	LGV	OGV1	OGV2
07:00 - 07:15	0.0	0.0	0.0	0.0
07:15 - 07:30	0.0	0.0	0.0	0.0
07:30 - 07:45	0.0	1.0	0.0	0.0
07:45 - 08:00	0.0	0.0	0.0	0.0
Hourly Total	**0.0**	**1.0**	**0.0**	**0.0**
08:00 - 08:15	1.0	0.0	0.0	0.0
08:15 - 08:30	2.0	0.0	0.0	0.0
08:30 - 08:45	0.0	0.0	0.0	0.0
08:45 - 09:00	0.0	0.0	0.0	0.0
Hourly Total	**3.0**	**0.0**	**0.0**	**0.0**
09:00 - 09:15	0.0	0.0	0.0	0.0
09:15 - 09:30	1.0	0.0	0.0	0.0
09:30 - 09:45	0.0	0.0	0.0	0.0
09:45 - 10:00	0.0	2.0	0.0	0.0
Hourly Total	**1.0**	**2.0**	**0.0**	**0.0**

Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2110 Church Road

Classified Counts

Job Number & Name: **6649 East Grinstead**

Client: **JUBB**

Date: **Tuesday 04 November 2014**

	Movement I							Movement J							Movement K							Movement L						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	6	1	1	1	0	0	0	1	1	0	0	0	0	0	28	1	1	0	0	0	0	6	0	0	0	0	0	0
07:15 - 07:30	15	1	4	0	0	0	0	0	0	0	1	0	0	0	36	4	1	0	0	0	0	7	1	1	1	2	1	0
07:30 - 07:45	31	0	3	1	0	1	0	2	0	0	0	0	0	0	57	8	1	1	0	0	0	12	2	0	0	2	1	0
07:45 - 08:00	17	3	0	1	0	0	0	2	0	0	0	0	0	0	79	8	0	0	1	0	0	10	2	0	1	0	0	0
Hourly Total	**69**	**5**	**8**	**3**	**0**	**1**	**0**	**5**	**1**	**0**	**1**	**0**	**0**	**0**	**200**	**21**	**3**	**1**	**1**	**0**	**0**	**35**	**5**	**1**	**2**	**4**	**2**	**0**
08:00 - 08:15	25	3	1	1	0	0	1	0	0	0	0	0	0	0	55	1	1	0	0	0	0	6	1	0	0	2	0	0
08:15 - 08:30	21	3	0	0	1	0	0	0	0	0	0	0	0	0	60	5	1	1	0	0	0	6	0	0	0	0	0	0
08:30 - 08:45	20	5	1	0	0	0	0	1	1	0	0	0	0	0	62	7	2	0	0	1	0	13	1	1	0	0	0	0
08:45 - 09:00	28	0	3	0	0	0	0	2	0	0	0	0	0	0	51	2	0	0	0	0	0	8	2	0	0	0	0	0
Hourly Total	**94**	**11**	**5**	**1**	**1**	**0**	**1**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**228**	**15**	**4**	**1**	**0**	**1**	**0**	**33**	**4**	**1**	**0**	**2**	**0**	**0**
09:00 - 09:15	27	1	4	1	0	0	0	2	0	0	0	0	0	0	27	8	0	1	1	0	0	7	0	0	0	0	0	0
09:15 - 09:30	19	1	1	1	0	0	0	0	0	0	0	0	0	0	30	7	1	0	1	0	0	5	0	2	0	0	1	0
09:30 - 09:45	10	4	1	0	1	0	0	0	0	0	0	0	0	0	26	4	2	0	0	0	0	9	4	0	1	0	0	0
09:45 - 10:00	11	0	1	1	0	0	0	1	0	0	0	0	0	0	19	4	3	0	0	0	0	12	2	2	0	0	0	0
Hourly Total	**67**	**6**	**7**	**3**	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**102**	**23**	**6**	**1**	**2**	**0**	**0**	**33**	**6**	**4**	**1**	**0**	**1**	**0**

Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2

PCU Values

	Moven			
Times	**Cars**	**LGV**	**OGV1**	**OGV2**
07:00 - 07:15	6.0	1.0	1.5	2.3
07:15 - 07:30	15.0	1.0	6.0	0.0
07:30 - 07:45	31.0	0.0	4.5	2.3
07:45 - 08:00	17.0	3.0	0.0	2.3
Hourly Total	**69.0**	**5.0**	**12.0**	**6.9**
08:00 - 08:15	25.0	3.0	1.5	2.3
08:15 - 08:30	21.0	3.0	0.0	0.0
08:30 - 08:45	20.0	5.0	1.5	0.0
08:45 - 09:00	28.0	0.0	4.5	0.0
Hourly Total	**94.0**	**11.0**	**7.5**	**2.3**
09:00 - 09:15	27.0	1.0	6.0	2.3
09:15 - 09:30	19.0	1.0	1.5	2.3
09:30 - 09:45	10.0	4.0	1.5	0.0
09:45 - 10:00	11.0	0.0	1.5	2.3
Hourly Total	**67.0**	**6.0**	**10.5**	**6.9**

Advanced Transport Research
Site 2 - B2028 Selsfield Road/B2110 Church Road
Classified Counts

Job Number & Name: **6649 East Grinstead**
Client: **JUBB**
Date: **Tuesday 04 November 2014**

	Movement M							Movement N							Movement O							Movement P						
Times	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc
07:00 - 07:15	2	1	0	1	0	0	0	58	14	1	1	0	0	0	1	2	0	0	0	0	0	92	15	1	0	0	2	1
07:15 - 07:30	6	0	0	0	0	0	0	72	7	2	0	0	0	0	4	1	0	0	0	0	0	107	11	2	0	0	0	0
07:30 - 07:45	6	3	0	0	0	0	0	55	11	0	2	0	0	0	4	0	1	0	0	0	0	111	4	1	0	0	1	0
07:45 - 08:00	6	2	1	0	0	0	0	70	12	2	1	1	3	0	0	2	0	0	0	0	0	118	8	2	1	0	2	0
Hourly Total	**20**	**6**	**1**	**1**	**0**	**0**	**0**	**255**	**44**	**5**	**4**	**1**	**3**	**0**	**9**	**5**	**1**	**0**	**0**	**0**	**0**	**428**	**38**	**6**	**1**	**0**	**5**	**1**
08:00 - 08:15	3	1	1	1	0	0	1	49	8	0	1	0	1	0	2	0	0	0	0	0	0	105	3	1	0	0	0	0
08:15 - 08:30	5	1	0	0	0	0	0	52	5	2	5	1	0	0	1	0	0	0	0	0	0	102	8	1	0	0	0	0
08:30 - 08:45	4	0	1	0	0	0	0	67	4	1	2	0	0	0	1	0	0	0	0	0	0	98	2	2	3	0	0	0
08:45 - 09:00	11	1	0	0	0	0	0	63	8	6	1	0	0	0	0	0	0	0	0	0	0	86	7	0	0	1	0	0
Hourly Total	**23**	**3**	**2**	**1**	**0**	**0**	**1**	**231**	**25**	**9**	**9**	**1**	**1**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**391**	**20**	**4**	**3**	**1**	**0**	**0**
09:00 - 09:15	10	0	1	0	0	0	0	49	5	1	1	0	1	0	2	0	0	0	0	0	0	61	3	0	0	0	0	1
09:15 - 09:30	4	0	1	0	0	0	0	55	7	1	0	1	0	0	1	0	0	0	0	0	0	63	4	1	0	0	1	0
09:30 - 09:45	2	2	1	0	0	0	0	39	6	2	1	0	0	0	0	0	0	0	0	0	0	36	8	2	1	0	1	0
09:45 - 10:00	6	1	0	0	0	0	0	38	10	3	1	1	0	1	1	0	0	0	0	0	0	33	5	2	0	0	0	0
Hourly Total	**22**	**3**	**3**	**0**	**0**	**0**	**0**	**181**	**28**	**7**	**3**	**2**	**1**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**193**	**20**	**5**	**1**	**0**	**2**	**1**

Advanced Transport Research
Site 2 - B2028 Selsfield Road/B2
PCU Values

	Movem			
Times	Cars	LGV	OGV1	OGV2
07:00 - 07:15	2.0	1.0	0.0	2.3
07:15 - 07:30	6.0	0.0	0.0	0.0
07:30 - 07:45	6.0	3.0	0.0	0.0
07:45 - 08:00	6.0	2.0	1.5	0.0
Hourly Total	**20.0**	**6.0**	**1.5**	**2.3**
08:00 - 08:15	3.0	1.0	1.5	2.3
08:15 - 08:30	5.0	1.0	0.0	0.0
08:30 - 08:45	4.0	0.0	1.5	0.0
08:45 - 09:00	11.0	1.0	0.0	0.0
Hourly Total	**23.0**	**3.0**	**3.0**	**2.3**
09:00 - 09:15	10.0	0.0	1.5	0.0
09:15 - 09:30	4.0	0.0	1.5	0.0
09:30 - 09:45	2.0	2.0	1.5	0.0
09:45 - 10:00	6.0	1.0	0.0	0.0
Hourly Total	**22.0**	**3.0**	**4.5**	**0.0**

Advanced Transport Research
Site 2 - B2028 Selsfield Road/B2110 Church Road
Classified Counts

Job Number & Name: **6649 East Grinstead**
Client: **JUBB**
Date: **Tuesday 04 November 2014**

	Movement Q							Movement R							Movement S							Movement T						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	18	4	2	0	0	0	0	14	10	0	0	0	0	0	6	1	0	0	0	0	0	1	0	0	0	0	0	0
07:15 - 07:30	21	5	3	0	2	0	0	32	4	2	0	0	0	0	10	2	0	0	0	0	0	1	0	0	0	0	0	0
07:30 - 07:45	20	10	2	1	1	0	0	30	9	1	1	0	1	0	11	1	0	0	0	0	0	1	0	0	0	0	0	0
07:45 - 08:00	16	6	2	0	0	0	0	39	8	1	0	0	1	0	13	2	1	0	0	0	0	0	0	1	0	0	0	0
Hourly Total	**75**	**25**	**9**	**1**	**3**	**0**	**0**	**115**	**31**	**4**	**1**	**0**	**2**	**0**	**40**	**6**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**
08:00 - 08:15	25	5	0	0	0	0	0	38	12	0	0	1	0	0	6	0	0	1	2	0	0	0	0	0	0	0	0	0
08:15 - 08:30	27	5	1	0	0	0	0	46	7	2	0	0	0	0	9	0	0	0	0	0	0	1	0	1	0	0	0	0
08:30 - 08:45	18	12	0	1	0	0	0	36	7	1	0	1	0	0	11	0	0	0	0	0	0	1	1	1	0	0	0	0
08:45 - 09:00	21	2	3	1	0	0	0	39	7	0	0	0	1	0	11	0	2	0	0	0	0	1	0	0	0	0	0	0
Hourly Total	**91**	**24**	**4**	**2**	**0**	**0**	**0**	**159**	**33**	**3**	**0**	**2**	**1**	**0**	**37**	**0**	**2**	**1**	**2**	**0**	**0**	**3**	**1**	**2**	**0**	**0**	**0**	**0**
09:00 - 09:15	29	11	0	1	0	0	0	27	1	1	0	0	0	0	13	1	0	0	0	0	0	1	0	0	0	0	0	0
09:15 - 09:30	40	9	0	1	0	0	0	45	4	1	1	0	0	0	8	1	0	0	0	0	0	3	1	0	0	0	0	0
09:30 - 09:45	42	13	3	3	0	0	0	26	6	2	0	0	0	0	12	3	0	0	0	0	0	0	1	0	0	0	0	0
09:45 - 10:00	53	6	3	1	0	0	0	37	4	2	0	2	0	0	6	3	0	0	1	0	0	3	1	0	0	0	0	0
Hourly Total	**164**	**39**	**6**	**6**	**0**	**0**	**0**	**135**	**15**	**6**	**1**	**2**	**0**	**0**	**39**	**8**	**0**	**0**	**1**	**0**	**0**	**7**	**3**	**0**	**0**	**0**	**0**	**0**

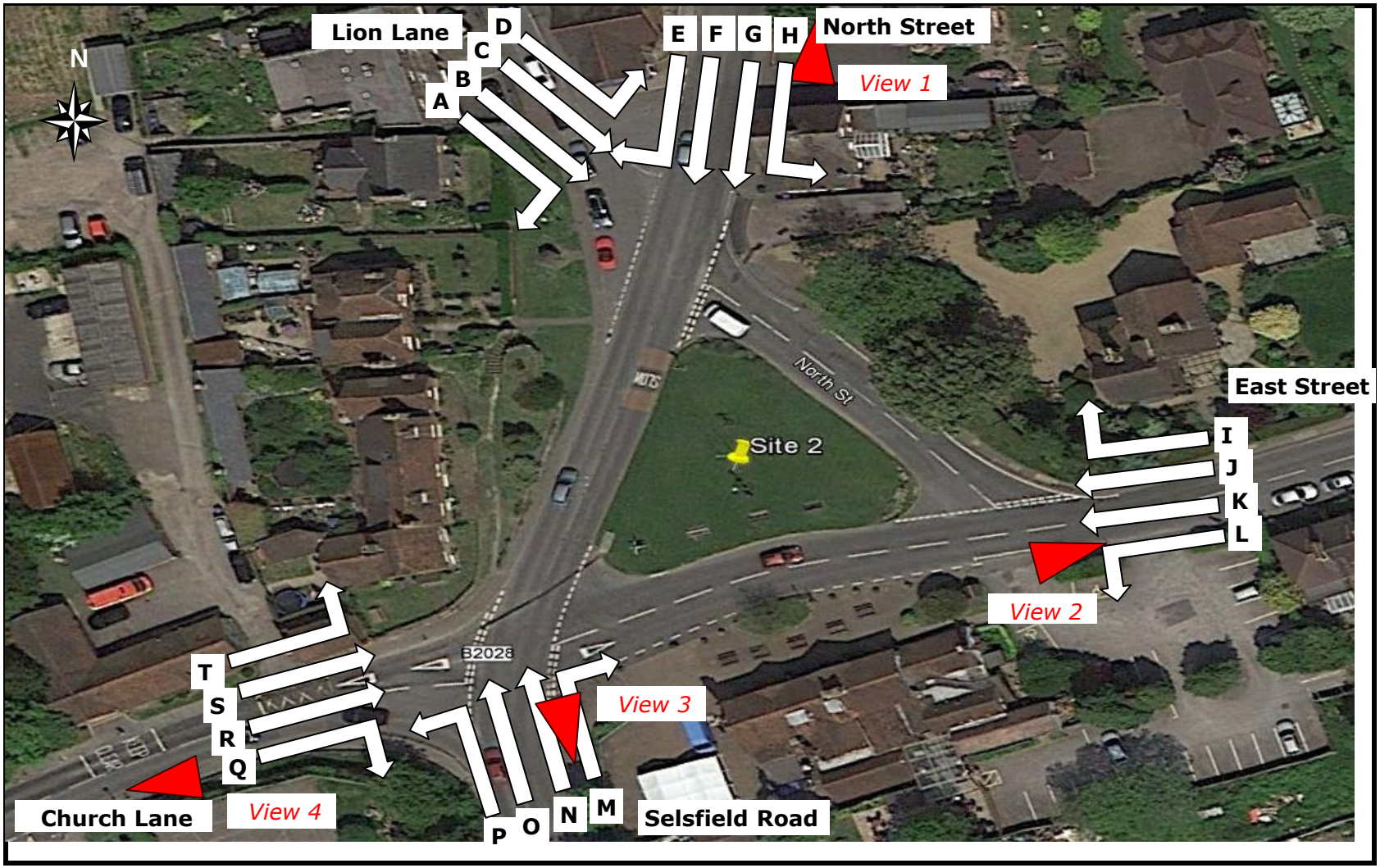
Advanced Transport Research
Site 2 - B2028 Selsfield Road/B2
PCU Values

	Moven			
Times	**Cars**	**LGV**	**OGV1**	**OGV2**
07:00 - 07:15	18.0	4.0	3.0	0.0
07:15 - 07:30	21.0	5.0	4.5	0.0
07:30 - 07:45	20.0	10.0	3.0	2.3
07:45 - 08:00	16.0	6.0	3.0	0.0
Hourly Total	**75.0**	**25.0**	**13.5**	**2.3**
08:00 - 08:15	25.0	5.0	0.0	0.0
08:15 - 08:30	27.0	5.0	1.5	0.0
08:30 - 08:45	18.0	12.0	0.0	2.3
08:45 - 09:00	21.0	2.0	4.5	2.3
Hourly Total	**91.0**	**24.0**	**6.0**	**4.6**
09:00 - 09:15	29.0	11.0	0.0	2.3
09:15 - 09:30	40.0	9.0	0.0	2.3
09:30 - 09:45	42.0	13.0	4.5	6.9
09:45 - 10:00	53.0	6.0	4.5	2.3
Hourly Total	**164.0**	**39.0**	**9.0**	**13.8**

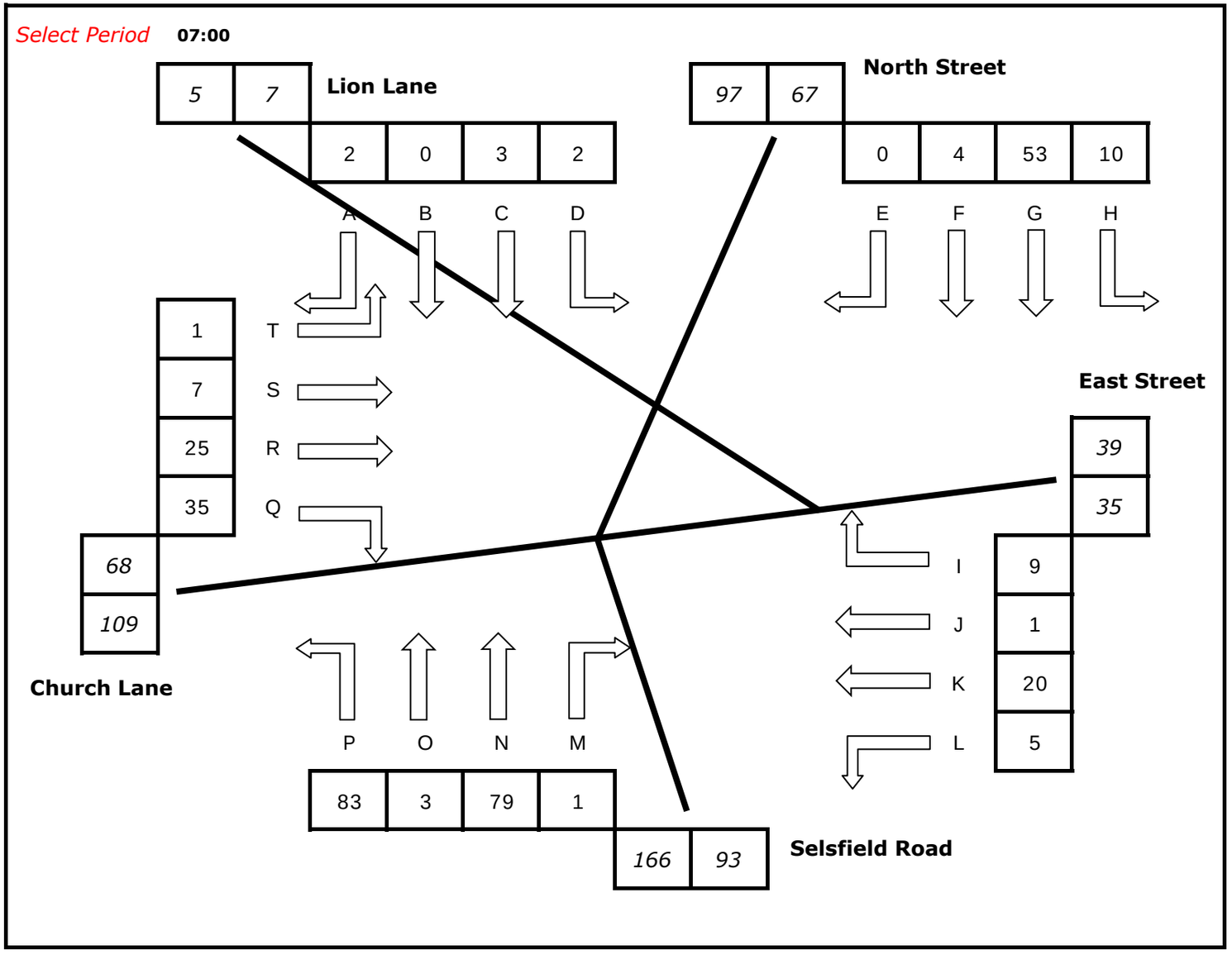
advanced transport research

Job Number & Name:	6649 East Grinstead
Site Number/Name:	Site 2 - B2028 Selsfield Road/B2110 Church Road
Client:	JUBB
Date:	05/11/2014
Weather:	Cloudy, Dry
Comments:	None

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 2 - B2028 Selsfield Road/B2110 Church Road	*Client:*	**JUBB**
Site Plan	*Date:*	**Wednesday 05 Nov 2014**



Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 2 - B2028 Selsfield Road/B2110 Church Road	*Client:*	**JUBB**
Flow Diagram	*Date:*	**Wednesday 05 Nov 2014**



Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2110 Church Road

Classified Counts

Job Number & Name: **6649 East Grinstead**

Client: **JUBB**

Date: **Wednesday 05 November 2014**

	Movement A							Movement B							Movement C							Movement D						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	2	0	0	0	0	0	0
07:15 - 07:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
07:30 - 07:45	2	0	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0	2	0	0	0	0	0	0
07:45 - 08:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0
Hourly Total	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**1**	**1**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**
08:00 - 08:15	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
08:15 - 08:30	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	2	0	0	0	0	0	1	0	0	0	0	0	0
08:30 - 08:45	2	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	2	0	0	0	0	0	0
08:45 - 09:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	1	0	0	0	0
Hourly Total	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**6**	**4**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**1**	**0**	**0**	**0**	**0**
09:00 - 09:15	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	4	1	0	0	0	0	0
09:15 - 09:30	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0
09:30 - 09:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0
09:45 - 10:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	1	0	0	0	0	0	0
Hourly Total	**8**	**1**	**1**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**0**	**0**
15:00 - 15:15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0
15:15 - 15:30	3	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	9	1	0	0	0	0	0
15:30 - 15:45	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0
15:45 - 16:00	2	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
Hourly Total	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**2**	**1**	**0**	**0**	**0**	**0**
16:00 - 16:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15 - 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**1**	**3**	**3**	**0**	**0**	**0**	**0**	**0**
17:00 - 17:15	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**

Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2110 Church Road

Classified Counts

Job Number & Name: **6649 East Grinstead**

Client: **JUBB**

Date: **Wednesday 05 November 2014**

	Movement E							Movement F							Movement G							Movement H						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	0	0	0	0	0	0	0	3	1	0	0	0	0	0	37	11	2	2	0	1	0	6	3	1	0	0	0	0
07:15 - 07:30	0	0	0	0	0	0	0	8	2	0	0	0	0	0	55	7	2	0	4	0	0	13	6	1	1	2	0	0
07:30 - 07:45	1	0	0	0	0	0	0	19	6	1	0	0	0	0	64	20	1	2	4	1	0	21	3	3	0	0	0	0
07:45 - 08:00	0	0	0	0	0	0	0	19	1	0	0	0	0	0	63	22	5	0	0	0	0	52	5	0	0	0	0	0
Hourly Total	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**49**	**10**	**1**	**0**	**0**	**0**	**0**	**219**	**60**	**10**	**4**	**8**	**2**	**0**	**92**	**17**	**5**	**1**	**2**	**0**	**0**
08:00 - 08:15	0	0	1	0	0	0	0	16	3	0	0	0	0	0	77	14	3	2	0	0	0	57	7	3	0	1	0	0
08:15 - 08:30	0	0	0	0	0	0	0	30	0	1	0	0	0	0	64	19	2	0	1	0	0	43	6	2	0	0	0	0
08:30 - 08:45	3	0	0	0	0	0	0	18	0	0	0	0	0	0	66	17	5	0	0	1	0	61	8	2	1	0	0	0
08:45 - 09:00	1	0	0	0	0	0	0	15	5	0	0	0	0	0	70	18	13	0	0	0	0	72	8	3	0	0	0	0
Hourly Total	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**79**	**8**	**1**	**0**	**0**	**0**	**0**	**277**	**68**	**23**	**2**	**1**	**1**	**0**	**233**	**29**	**10**	**1**	**1**	**0**	**0**
09:00 - 09:15	2	0	0	0	0	0	0	14	1	0	0	0	0	0	81	9	1	3	0	0	0	32	8	0	2	0	0	0
09:15 - 09:30	1	0	0	0	0	0	0	8	1	0	0	0	3	0	64	8	1	0	0	0	0	21	3	2	0	0	0	0
09:30 - 09:45	0	0	0	0	0	0	0	10	2	3	0	0	0	0	77	15	6	1	0	0	0	23	5	1	2	0	0	1
09:45 - 10:00	0	0	0	0	0	0	0	10	2	2	0	0	0	1	92	3	2	2	0	2	0	28	0	4	2	0	0	0
Hourly Total	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**42**	**6**	**5**	**0**	**0**	**3**	**1**	**314**	**35**	**10**	**6**	**0**	**2**	**0**	**104**	**16**	**7**	**6**	**0**	**0**	**1**

Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2

PCU Values

	Moven			
Times	**Cars**	**LGV**	**OGV1**	**OGV2**
07:00 - 07:15	0.0	0.0	0.0	0.0
07:15 - 07:30	0.0	0.0	0.0	0.0
07:30 - 07:45	1.0	0.0	0.0	0.0
07:45 - 08:00	0.0	0.0	0.0	0.0
Hourly Total	**1.0**	**0.0**	**0.0**	**0.0**
08:00 - 08:15	0.0	0.0	1.5	0.0
08:15 - 08:30	0.0	0.0	0.0	0.0
08:30 - 08:45	3.0	0.0	0.0	0.0
08:45 - 09:00	1.0	0.0	0.0	0.0
Hourly Total	**4.0**	**0.0**	**1.5**	**0.0**
09:00 - 09:15	2.0	0.0	0.0	0.0
09:15 - 09:30	1.0	0.0	0.0	0.0
09:30 - 09:45	0.0	0.0	0.0	0.0
09:45 - 10:00	0.0	0.0	0.0	0.0
Hourly Total	**3.0**	**0.0**	**0.0**	**0.0**

Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2110 Church Road

Classified Counts

Job Number & Name: **6649 East Grinstead**

Client: **JUBB**

Date: **Wednesday 05 November 2014**

	Movement I							Movement J							Movement K							Movement L						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	6	2	1	0	0	0	0	1	0	0	0	0	0	0	18	1	1	0	0	0	0	3	1	0	1	0	0	0
07:15 - 07:30	7	2	4	1	0	0	0	2	0	0	0	0	0	0	47	6	1	0	0	0	0	5	0	0	0	2	1	0
07:30 - 07:45	18	3	0	1	0	0	0	0	0	0	0	0	0	0	57	4	0	0	0	0	0	9	2	0	0	0	0	0
07:45 - 08:00	24	1	1	1	0	0	0	0	0	1	0	0	0	0	56	8	2	1	0	0	0	10	0	0	0	1	0	0
Hourly Total	**55**	**8**	**6**	**3**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**178**	**19**	**4**	**1**	**0**	**0**	**0**	**27**	**3**	**0**	**1**	**3**	**1**	**0**
08:00 - 08:15	28	5	2	1	0	0	0	1	0	0	0	0	0	0	66	9	2	0	1	0	0	8	0	1	0	2	0	0
08:15 - 08:30	25	5	2	0	0	0	1	0	0	0	0	0	0	0	64	7	3	0	0	0	0	7	0	0	0	0	0	0
08:30 - 08:45	27	1	2	0	0	0	0	1	0	0	0	0	0	0	62	5	2	1	0	0	0	12	1	0	0	0	0	0
08:45 - 09:00	14	5	2	2	0	0	0	0	1	1	0	0	0	0	51	7	1	1	0	0	0	9	0	2	0	0	0	0
Hourly Total	**94**	**16**	**8**	**3**	**0**	**0**	**1**	**2**	**1**	**1**	**0**	**0**	**0**	**0**	**243**	**28**	**8**	**2**	**1**	**0**	**0**	**36**	**1**	**3**	**0**	**2**	**0**	**0**
09:00 - 09:15	29	3	2	0	0	0	0	4	1	0	0	0	0	0	38	5	0	0	2	2	0	11	1	1	0	0	0	0
09:15 - 09:30	18	2	1	1	0	0	0	1	0	0	0	0	0	0	34	7	3	1	1	0	0	8	0	0	0	0	0	0
09:30 - 09:45	7	2	2	1	0	0	0	2	0	0	0	0	0	0	14	2	1	0	0	1	0	15	3	2	0	0	0	0
09:45 - 10:00	20	4	1	0	0	0	0	0	0	1	0	0	0	0	19	3	1	0	0	0	0	10	1	0	1	0	0	0
Hourly Total	**74**	**11**	**6**	**2**	**0**	**0**	**0**	**7**	**1**	**1**	**0**	**0**	**0**	**0**	**105**	**17**	**5**	**1**	**3**	**3**	**0**	**44**	**5**	**3**	**1**	**0**	**0**	**0**

Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2

PCU Values

	Moven			
Times	**Cars**	**LGV**	**OGV1**	**OGV2**
07:00 - 07:15	6.0	2.0	1.5	0.0
07:15 - 07:30	7.0	2.0	6.0	2.3
07:30 - 07:45	18.0	3.0	0.0	2.3
07:45 - 08:00	24.0	1.0	1.5	2.3
Hourly Total	**55.0**	**8.0**	**9.0**	**6.9**
08:00 - 08:15	28.0	5.0	3.0	2.3
08:15 - 08:30	25.0	5.0	3.0	0.0
08:30 - 08:45	27.0	1.0	3.0	0.0
08:45 - 09:00	14.0	5.0	3.0	4.6
Hourly Total	**94.0**	**16.0**	**12.0**	**6.9**
09:00 - 09:15	29.0	3.0	3.0	0.0
09:15 - 09:30	18.0	2.0	1.5	2.3
09:30 - 09:45	7.0	2.0	3.0	2.3
09:45 - 10:00	20.0	4.0	1.5	0.0
Hourly Total	**74.0**	**11.0**	**9.0**	**4.6**

Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2110 Church Road

Classified Counts

Job Number & Name: **6649 East Grinstead**

Client: **JUBB**

Date: **Wednesday 05 November 2014**

	Movement M							Movement N							Movement O							Movement P						
Times	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**	**Cars**	**LGV**	**OGV1**	**OGV2**	**PSV**	**M/B**	**Cyc**
07:00 - 07:15	1	0	0	0	0	0	0	65	9	4	1	0	0	0	3	0	0	0	0	0	0	71	9	2	0	0	1	0
07:15 - 07:30	9	1	0	0	0	0	0	75	9	0	1	0	1	0	4	0	0	0	0	0	0	83	10	0	0	0	1	0
07:30 - 07:45	5	0	0	0	0	0	0	68	9	2	1	0	1	0	3	0	0	0	0	0	0	112	6	1	0	0	1	0
07:45 - 08:00	4	2	0	0	0	0	0	47	10	3	0	1	2	0	2	0	0	0	0	0	0	102	9	1	0	0	0	0
Hourly Total	**19**	**3**	**0**	**0**	**0**	**0**	**0**	**255**	**37**	**9**	**3**	**1**	**4**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**368**	**34**	**4**	**0**	**0**	**3**	**0**
08:00 - 08:15	3	0	0	1	0	1	0	47	10	2	1	0	1	0	2	1	0	0	0	0	0	130	9	0	1	0	0	1
08:15 - 08:30	4	0	1	0	0	0	0	57	5	0	2	1	0	0	0	0	0	0	0	0	0	127	5	0	1	0	0	0
08:30 - 08:45	4	0	2	1	0	0	0	53	7	1	3	1	0	0	2	0	0	0	0	0	0	108	5	1	1	0	0	0
08:45 - 09:00	8	1	0	0	0	0	0	40	7	5	1	0	0	0	2	0	0	0	0	0	0	64	6	1	0	0	1	0
Hourly Total	**19**	**1**	**3**	**2**	**0**	**1**	**0**	**197**	**29**	**8**	**7**	**2**	**1**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**429**	**25**	**2**	**3**	**0**	**1**	**1**
09:00 - 09:15	7	1	0	0	0	0	0	47	5	2	0	1	0	0	2	1	0	0	0	0	0	51	5	1	0	0	0	0
09:15 - 09:30	2	0	0	0	0	0	0	55	9	2	1	0	0	0	0	0	0	0	0	0	0	39	7	3	0	0	0	0
09:30 - 09:45	5	1	1	0	0	0	0	50	8	4	1	0	0	0	2	0	0	0	0	0	0	45	7	1	0	0	0	0
09:45 - 10:00	7	4	1	0	0	0	0	41	2	1	4	0	0	0	1	1	0	0	0	0	0	28	1	1	2	0	0	0
Hourly Total	**21**	**6**	**2**	**0**	**0**	**0**	**0**	**193**	**24**	**9**	**6**	**1**	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**163**	**20**	**6**	**2**	**0**	**0**	**0**

Advanced Transport Research

Site 2 - B2028 Selsfield Road/B2

PCU Values

	Movem			
Times	**Cars**	**LGV**	**OGV1**	**OGV2**
07:00 - 07:15	1.0	0.0	0.0	0.0
07:15 - 07:30	9.0	1.0	0.0	0.0
07:30 - 07:45	5.0	0.0	0.0	0.0
07:45 - 08:00	4.0	2.0	0.0	0.0
Hourly Total	**19.0**	**3.0**	**0.0**	**0.0**
08:00 - 08:15	3.0	0.0	0.0	2.3
08:15 - 08:30	4.0	0.0	1.5	0.0
08:30 - 08:45	4.0	0.0	3.0	2.3
08:45 - 09:00	8.0	1.0	0.0	0.0
Hourly Total	**19.0**	**1.0**	**4.5**	**4.6**
09:00 - 09:15	7.0	1.0	0.0	0.0
09:15 - 09:30	2.0	0.0	0.0	0.0
09:30 - 09:45	5.0	1.0	1.5	0.0
09:45 - 10:00	7.0	4.0	1.5	0.0
Hourly Total	**21.0**	**6.0**	**3.0**	**0.0**

Advanced Transport Research
Site 2 - B2028 Selsfield Road/B2110 Church Road
Classified Counts

Job Number & Name: **6649 East Grinstead**
Client: **JUBB**
Date: **Wednesday 05 November 2014**

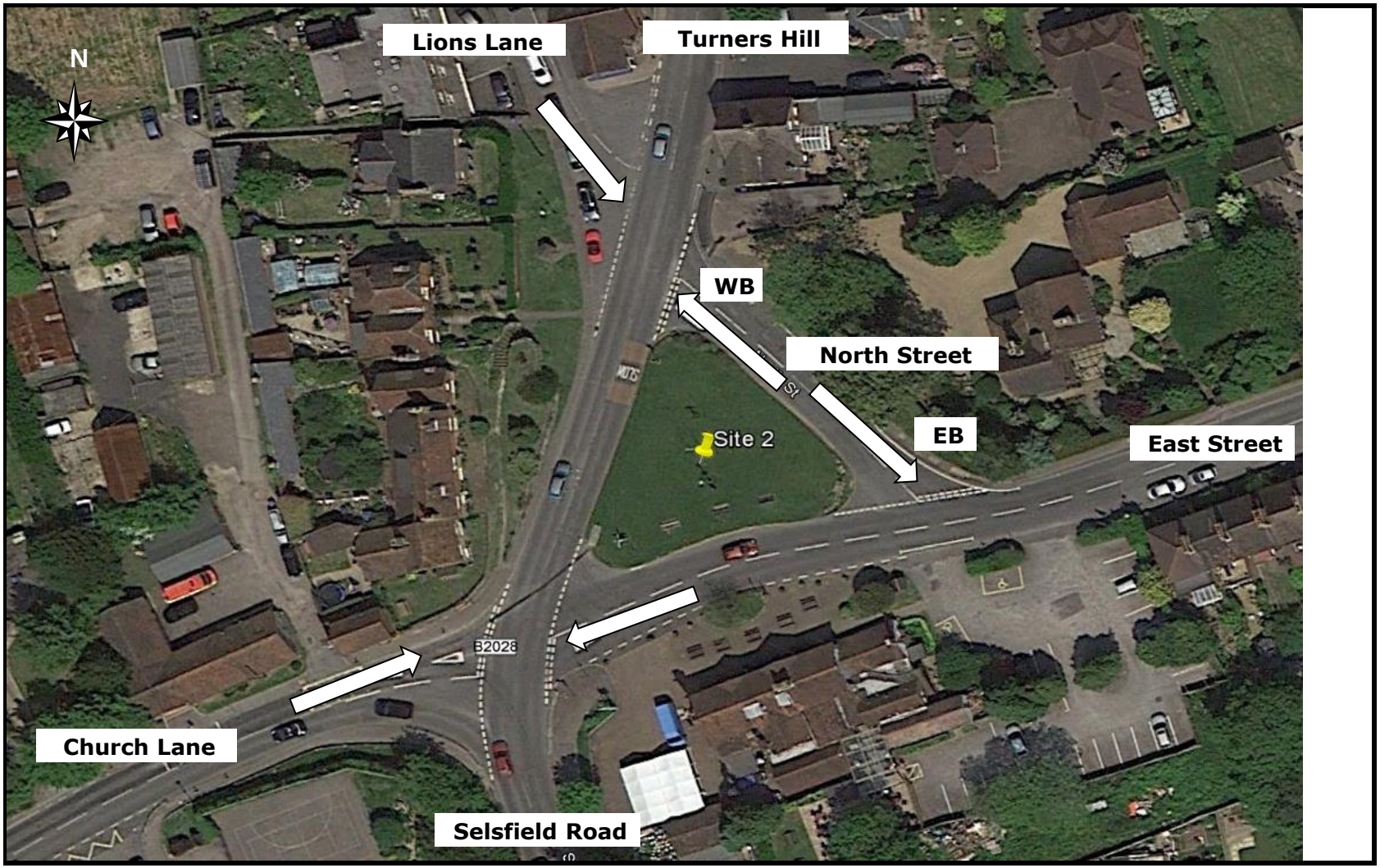
	Movement Q							Movement R							Movement S							Movement T						
Times	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc	Cars	LGV	OGV1	OGV2	PSV	M/B	Cyc
07:00 - 07:15	26	8	0	0	1	0	0	16	6	2	0	0	0	1	6	1	0	0	0	0	0	1	0	0	0	0	0	0
07:15 - 07:30	24	7	3	0	0	0	0	33	3	0	1	0	0	0	5	3	0	0	0	0	0	0	1	0	0	0	0	0
07:30 - 07:45	19	7	0	0	0	0	0	37	7	1	0	0	0	1	8	3	0	0	0	1	0	0	1	0	0	0	0	0
07:45 - 08:00	17	13	1	0	1	0	0	48	10	1	1	0	0	0	6	2	1	0	1	0	0	1	0	0	0	0	0	0
Hourly Total	**86**	**35**	**4**	**0**	**2**	**0**	**0**	**134**	**26**	**4**	**2**	**0**	**0**	**2**	**25**	**9**	**1**	**0**	**1**	**1**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**
08:00 - 08:15	18	5	2	0	0	0	0	42	7	1	0	1	0	0	5	1	1	0	2	0	0	1	1	0	0	0	0	0
08:15 - 08:30	20	5	0	0	0	0	0	38	4	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 - 08:45	20	6	3	0	0	0	0	43	8	1	1	1	0	0	9	1	1	0	0	0	1	2	0	0	0	0	0	0
08:45 - 09:00	23	5	1	2	0	0	0	28	9	2	0	0	0	0	8	1	1	0	0	0	0	3	0	0	0	0	0	0
Hourly Total	**81**	**21**	**6**	**2**	**0**	**0**	**0**	**151**	**28**	**6**	**1**	**2**	**0**	**0**	**25**	**3**	**3**	**0**	**2**	**0**	**1**	**6**	**1**	**0**	**0**	**0**	**0**	**0**
09:00 - 09:15	27	11	3	1	0	0	0	54	7	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 - 09:30	41	6	4	2	0	0	0	43	8	2	2	0	0	0	21	4	1	0	0	0	0	2	0	0	0	0	0	0
09:30 - 09:45	34	13	0	0	0	0	0	46	4	0	0	1	1	0	7	2	1	0	0	0	1	4	0	0	0	0	0	0
09:45 - 10:00	41	9	3	2	0	0	1	21	4	2	0	1	0	0	2	1	0	0	1	0	0	2	0	0	0	0	0	0
Hourly Total	**143**	**39**	**10**	**5**	**0**	**0**	**1**	**164**	**23**	**4**	**2**	**2**	**1**	**0**	**47**	**7**	**2**	**0**	**1**	**0**	**1**	**8**	**0**	**0**	**0**	**0**	**0**	**0**

Advanced Transport Research
Site 2 - B2028 Selsfield Road/B2
PCU Values

	Moven			
Times	Cars	LGV	OGV1	OGV2
07:00 - 07:15	26.0	8.0	0.0	0.0
07:15 - 07:30	24.0	7.0	4.5	0.0
07:30 - 07:45	19.0	7.0	0.0	0.0
07:45 - 08:00	17.0	13.0	1.5	0.0
Hourly Total	**86.0**	**35.0**	**6.0**	**0.0**
08:00 - 08:15	18.0	5.0	3.0	0.0
08:15 - 08:30	20.0	5.0	0.0	0.0
08:30 - 08:45	20.0	6.0	4.5	0.0
08:45 - 09:00	23.0	5.0	1.5	4.6
Hourly Total	**81.0**	**21.0**	**9.0**	**4.6**
09:00 - 09:15	27.0	11.0	4.5	2.3
09:15 - 09:30	41.0	6.0	6.0	4.6
09:30 - 09:45	34.0	13.0	0.0	0.0
09:45 - 10:00	41.0	9.0	4.5	4.6
Hourly Total	**143.0**	**39.0**	**15.0**	**11.5**

Job Number & Name:	6649 East Grinstead
Site Number/Name:	Site 2 - B2028 Selfield Road/B2110 Church Road
Client:	JUBB
Date:	04/11/2014
Weather:	
Comments:	

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 2 - B2028 Selfield Road/B2110 Church Road	*Client:*	**JUBB**
Site Plan	*Date:*	**Tuesday 04 Nov 2014**



Advanced Transport Research	*Job Number & Name:*	6649 East Grinstead
Site 2 - B2028 Selfield Road/B2110 Church Road	*Client:*	JUBB
Queue Lengths	*Date:*	Tuesday 04 November 2014

	Church Lane	Lion Lane	North Street EB	North Street WB	East Street
Times	Lane 1	Lane 1	Lane 1	Lane 1	Lane 1
07:00 - 07:05	3	0	2	0	0
07:05 - 07:10	2	0	2	2	2
07:10 - 07:15	2	0	3	2	2
07:15 - 07:20	8	0	2	0	5
07:20 - 07:25	16	0	2	0	4
07:25 - 07:30	14	2	4	0	3
07:30 - 07:35	18	0	4	2	5
07:35 - 07:40	22	0	2	0	6
07:40 - 07:45	25+	0	3	0	6
07:45 - 07:50	25+	0	7	3	5
07:50 - 07:55	25+	0	7	4	5
07:55 - 08:00	25+	0	6	0	8
08:00 - 08:05	25+	0	4	0	4
08:05 - 08:10	25+	0	4	2	3
08:10 - 08:15	25+	0	4	2	10
08:15 - 08:20	25+	0	7	0	5
08:20 - 08:25	25+	0	3	0	3
08:25 - 08:30	25+	0	3	0	5
08:30 - 08:35	25+	0	3	2	4
08:35 - 08:40	25+	0	7	6	3
08:40 - 08:45	25+	0	4	4	5
08:45 - 08:50	25+	0	7	0	4
08:50 - 08:55	25+	0	2	0	5
08:55 - 09:00	25+	0	7	0	3
09:00 - 09:05	25+	0	6	0	6
09:05 - 09:10	25+	0	7	3	9
09:10 - 09:15	25+	0	4	0	6
09:15 - 09:20	25+	0	3	0	3
09:20 - 09:25	25+	0	3	0	2
09:25 - 09:30	25+	0	0	2	0
09:30 - 09:35	25+	0	0	0	0
09:35 - 09:40	25+	0	2	0	3
09:40 - 09:45	25+	0	0	0	3
09:45 - 09:50	25+	0	0	0	3
09:50 - 09:55	25+	0	2	0	3
09:55 - 10:00	25+	0	0	0	0

Count in

Lane 1 =

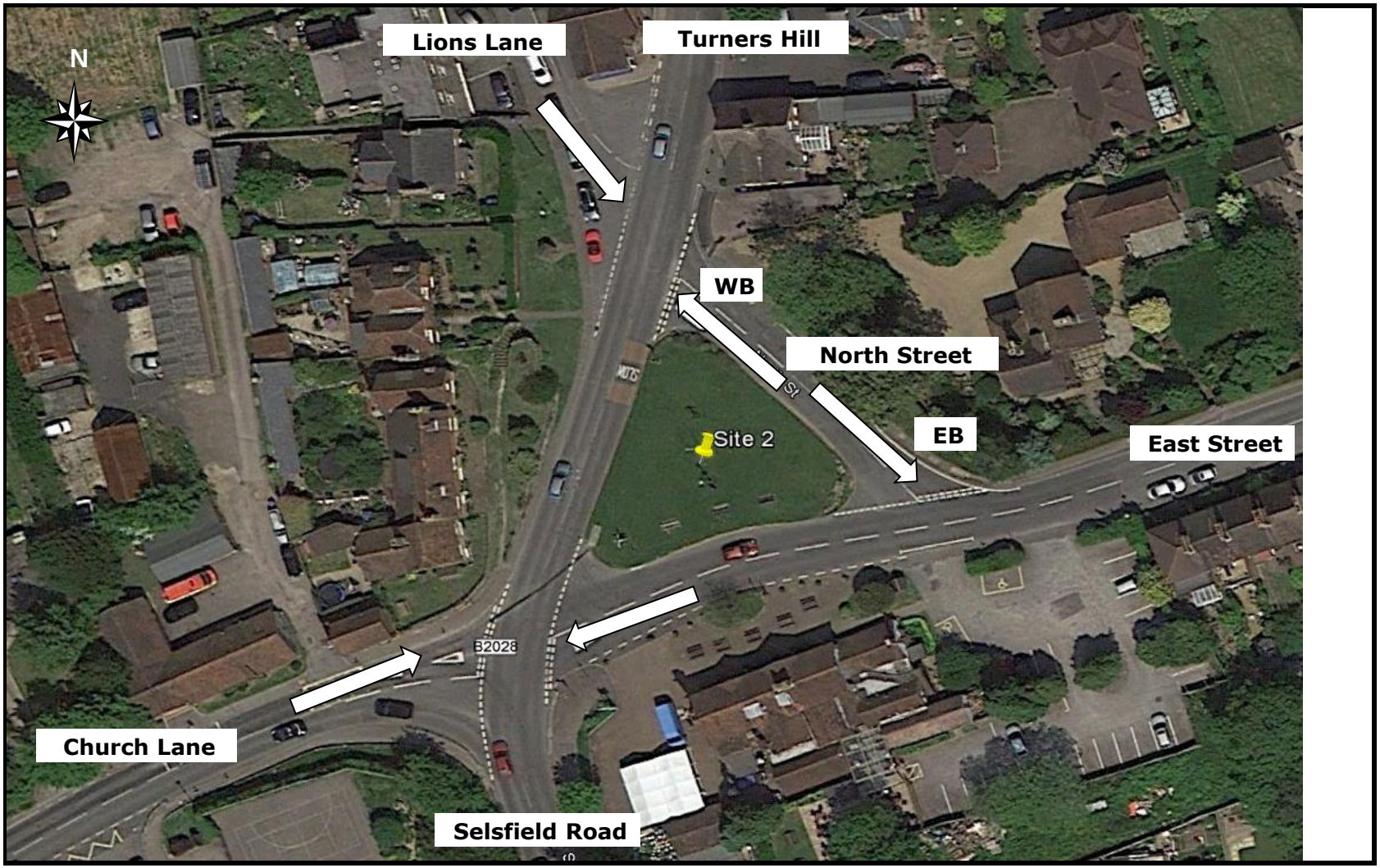
Advanced Transport Research	*Job Number & Name:*	6649 East Grinstead
Site 2 - B2028 Selfield Road/B2110 Church Road	*Client:*	JUBB
Queue Lengths	*Date:*	Tuesday 04 November 2014

	Church Lane	Lion Lane	North Street EB	North Street WB	East Street
Times	Lane 1	Lane 1	Lane 1	Lane 1	Lane 1
15:00 - 15:05	12	0	6	3	3
15:05 - 15:10	14	0	6	3	4
15:10 - 15:15	15	0	4	0	3
15:15 - 15:20	20	0	0	2	6
15:20 - 15:25	22	0	6	4	4
15:25 - 15:30	25+	0	4	6	14
15:30 - 15:35	25+	0	2	0	15
15:35 - 15:40	25+	0	4	0	16
15:40 - 15:45	25+	0	2	0	10
15:45 - 15:50	25+	0	6	3	12
15:50 - 15:55	25+	0	6	0	6
15:55 - 16:00	25+	0	7	0	6
16:00 - 16:05	25+	0	7	0	4
16:05 - 16:10	25+	0	4	5	3
16:10 - 16:15	25+	0	6	0	8
16:15 - 16:20	25+	0	6	0	7
16:20 - 16:25	25+	0	7	0	7
16:25 - 16:30	25+	0	7	3	14
16:30 - 16:35	25+	0	4	0	6
16:35 - 16:40	25+	0	3	0	4
16:40 - 16:45	25+	0	4	2	4
16:45 - 16:50	25+	0	6	0	4
16:50 - 16:55	25+	0	3	0	4
16:55 - 17:00	25+	0	6	0	4
17:00 - 17:05	25+	0	4	0	4
17:05 - 17:10	25+	0	6	0	4
17:10 - 17:15	25+	0	6	3	3
17:15 - 17:20	25+	0	7	0	4
17:20 - 17:25	25+	0	7	0	3
17:25 - 17:30	25+	0	7	3	7
17:30 - 17:35	25+	0	7	0	8
17:35 - 17:40	25+	0	7	3	10
17:40 - 17:45	25+	0	6	0	6
17:45 - 17:50	25+	0	6	3	5
17:50 - 17:55	25+	0	7	0	6
17:55 - 18:00	25+	0	6	2	5

Count in

Job Number & Name:	6649 East Grinstead
Site Number/Name:	Site 2 - B2028 Selfield Road/B2110 Church Road
Client:	JUBB
Date:	05/11/2014
Weather:	Cloudy, Dry
Comments:	

Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 2 - B2028 Selfield Road/B2110 Church Road	*Client:*	**JUBB**
Site Plan	*Date:*	**Wednesday 05 Nov 2014**



Advanced Transport Research	*Job Number & Name:*	**6649 East Grinstead**
Site 2 - B2028 Selfield Road/B2110 Church Road	*Client:*	**JUBB**
Queue Lengths	*Date:*	**Wednesday 05 November 2014**

	Church Lane	Lion Lane	North Street EB	North Street WB	East Street
Times	**Lane 1**	**Lane 1**	**Lane 1**	**Lane 1**	**Lane 1**
07:00 - 07:05	2	0	0	0	0
07:05 - 07:10	10	0	3	0	2
07:10 - 07:15	7	0	0	0	2
07:15 - 07:20	12	0	2	2	4
07:20 - 07:25	20	0	4	0	4
07:25 - 07:30	25+	0	0	4	3
07:30 - 07:35	25+	0	4	0	4
07:35 - 07:40	25+	0	3	0	3
07:40 - 07:45	25+	0	6	2	3
07:45 - 07:50	25+	0	7	3	4
07:50 - 07:55	25+	0	5	0	3
07:55 - 08:00	25+	0	7	4	4
08:00 - 08:05	25+	0	7	4	10
08:05 - 08:10	25+	0	5	4	6
08:10 - 08:15	25+	0	3	4	6
08:15 - 08:20	25+	0	4	0	5
08:20 - 08:25	25+	0	6	0	5
08:25 - 08:30	25+	0	6	2	10
08:30 - 08:35	25+	0	7	0	12
08:35 - 08:40	25+	0	6	2	6
08:40 - 08:45	25+	0	4	2	5
08:45 - 08:50	25+	0	3	3	5
08:50 - 08:55	25+	0	2	2	6
08:55 - 09:00	25+	0	6	2	5
09:00 - 09:05	25+	0	4	0	4
09:05 - 09:10	25+	0	6	3	8
09:10 - 09:15	25+	0	2	4	5
09:15 - 09:20	25+	0	2	2	2
09:20 - 09:25	25+	0	0	0	4
09:25 - 09:30	19	0	2	0	6
09:30 - 09:35	17	0	0	2	4
09:35 - 09:40	10	0	0	0	0
09:40 - 09:45	8	0	0	0	3
09:45 - 09:50	22	0	2	2	2
09:50 - 09:55	25	0	2	0	2
09:55 - 10:00	25+	0	2	0	2

Count in

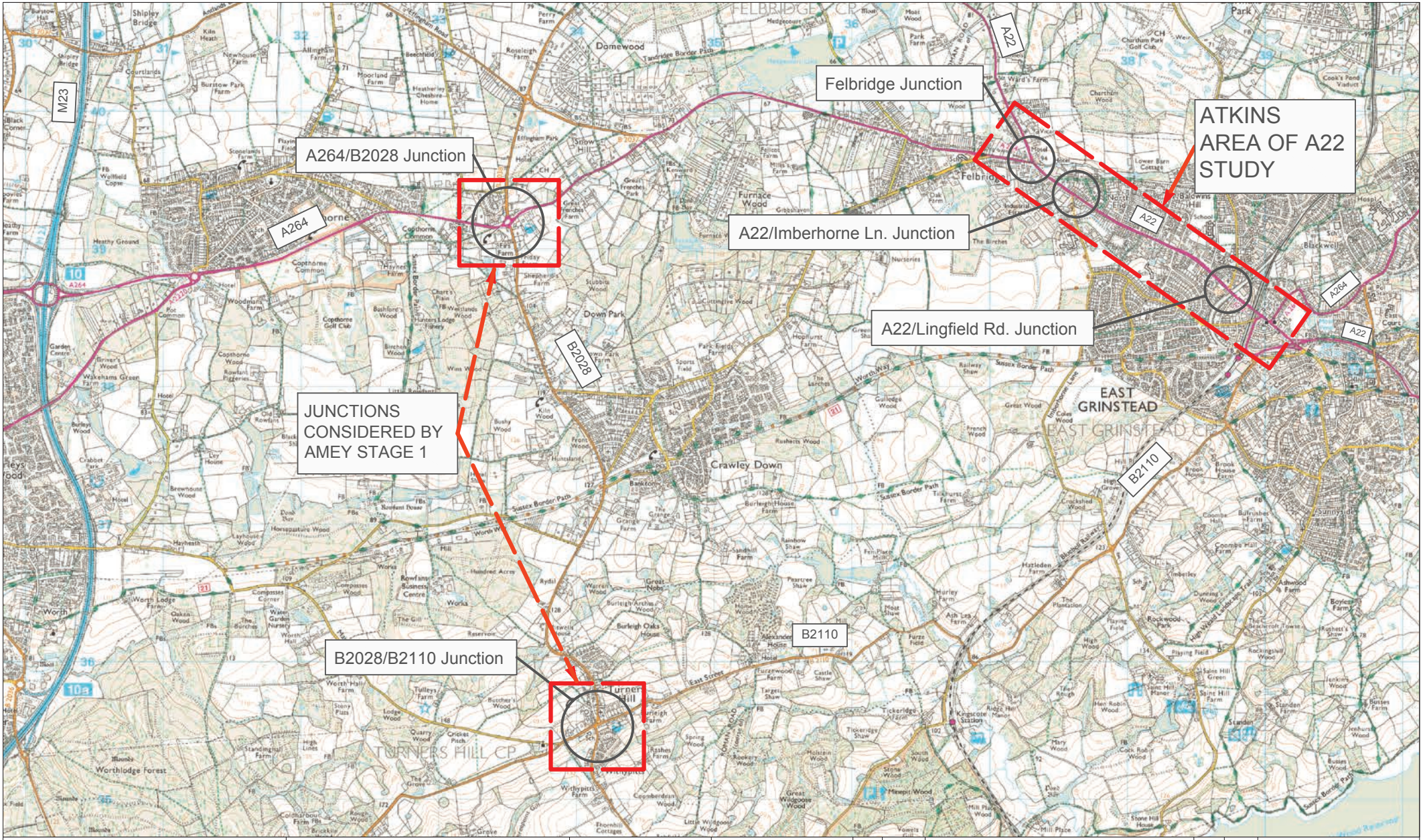
Lane 1 =

Advanced Transport Research	*Job Number & Name:*	6649 East Grinstead
Site 2 - B2028 Selfield Road/B2110 Church Road	*Client:*	JUBB
Queue Lengths	*Date:*	Wednesday 05 November 2014

	Church Lane	Lion Lane	North Street EB	North Street WB	East Street
Times	**Lane 1**	**Lane 1**	**Lane 1**	**Lane 1**	**Lane 1**
15:00 - 15:05	5	0	5	2	5
15:05 - 15:10	8	0	6	2	3
15:10 - 15:15	12	0	5	0	5
15:15 - 15:20	25	0	6	0	5
15:20 - 15:25	25+	2	3	4	5
15:25 - 15:30	25+	3	0	0	4
15:30 - 15:35	25+	0	0	0	5
15:35 - 15:40	10	0	2	0	2
15:40 - 15:45	8	0	3	3	6
15:45 - 15:50	25+	0	2	3	10
15:50 - 15:55	25+	0	3	0	14
15:55 - 16:00	25+	0	2	0	4
16:00 - 16:05	25+	0	3	2	3
16:05 - 16:10	25+	0	2	0	3
16:10 - 16:15	25+	0	5	3	3
16:15 - 16:20	25+	0	4	2	5
16:20 - 16:25	25+	0	5	0	4
16:25 - 16:30	25+	0	3	0	4
16:30 - 16:35	25+	0	6	3	4
16:35 - 16:40	25+	0	5	0	4
16:40 - 16:45	25+	0	5	0	5
16:45 - 16:50	25+	0	7	0	5
16:50 - 16:55	25+	0	7	2	6
16:55 - 17:00	25+	0	7	3	5
17:00 - 17:05	25+	0	4	0	6
17:05 - 17:10	25+	0	7	3	5
17:10 - 17:15	25+	0	7	2	6
17:15 - 17:20	25+	0	7	0	5
17:20 - 17:25	25+	0	5	0	10
17:25 - 17:30	25+	0	6	0	15
17:30 - 17:35	25+	0	7	3	14
17:35 - 17:40	25+	0	7	4	7
17:40 - 17:45	25+	0	7	0	15
17:45 - 17:50	25+	0	7	0	18
17:50 - 17:55	25+	0	7	0	16
17:55 - 18:00	25+	0	7	3	14

Count in

Appendix 3
Plan Showing Location of Junctions Considered



Project East Grinstead	Title Extent of Traffic Conditions Review Client/Architect	Scale @ A3 1:25,000	Project Ref 14209W					
		Drawing No	Rev A					
		REVISION REFERENCING P = Preliminary A = Approval T = Tender C = Construction		Rev	Date	Description	By	Apvd

Jubb
Suite 8, Ground Floor West, St. James Court
St. James Parade, Bristol, BS1 2LH
Tel: 0117 906 9560 Email: bristol@jubb.com

Appendix 4
A264/B2028 ARCADY Model

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Copthorne Junction (AM VAL - FINAL).arc8
Path: S:\PROJECT FOLDER\B14209 East Grinstead\Calculations\Transport\ARCADY
Report generation date: 14/01/2015 16:01:26

» (Default Analysis Set) - Tue 04/11/14, AM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Tue 04/11/14			
Turners Hill Rd (N)	19.21	92.02	0.97	F
Snow Hill	26.87	174.98	1.02	F
Turners Hill Rd (S)	23.05	128.81	1.00	F
Copthorne Common Rd	3.14	8.66	0.76	A

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - Tue 04/11/14, AM " model duration: 08:00 - 09:00

Run using Junctions 8.0.4.487 at 14/01/2015 16:01:24

File summary

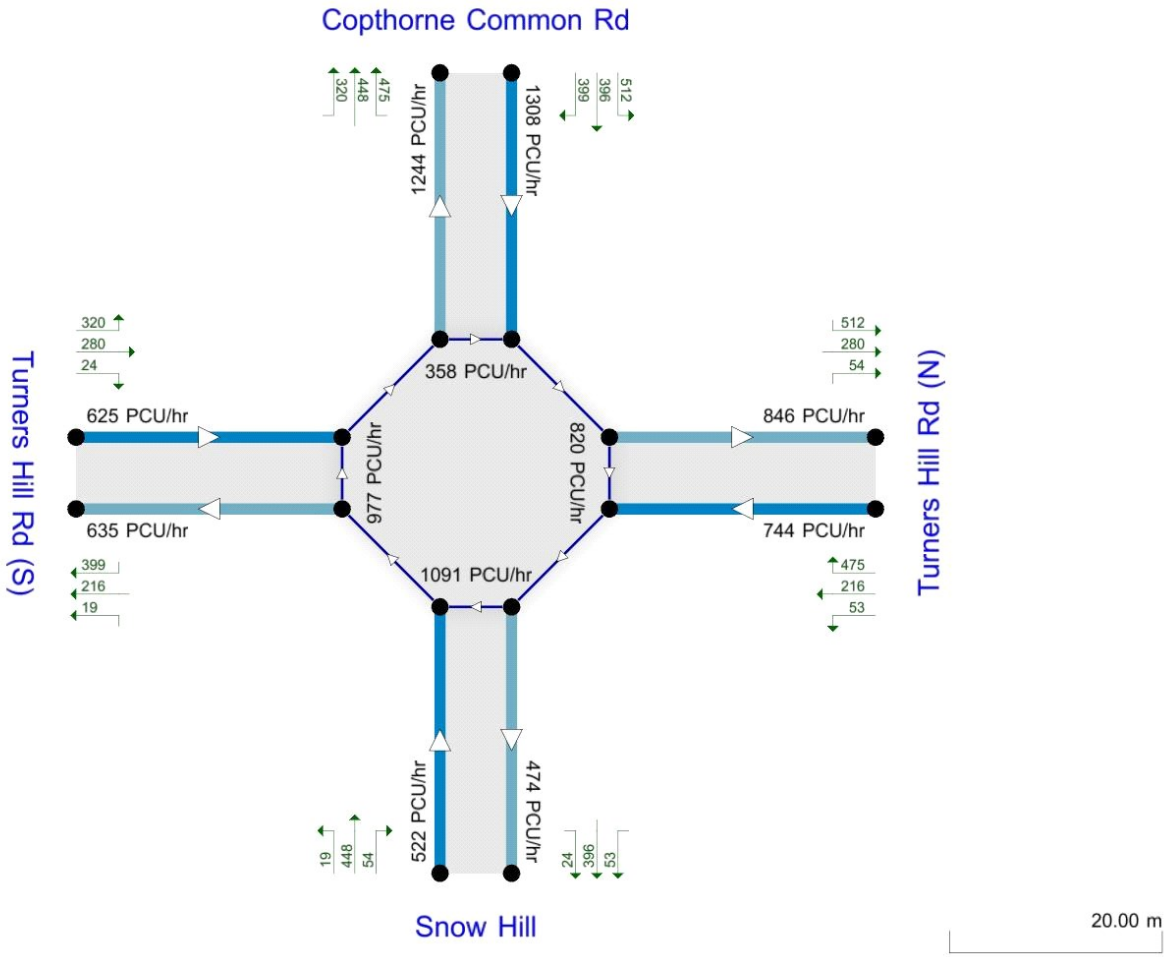
Title	Turners Hill Rd/Copthorne Common Rd
Location	Copthorne
Site Number	
Date	01/12/2014
Version	v1
Status	(new file)
Identifier	
Client	
Jobnumber	14209W
Enumerator	akaushik
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



Showing modelled flow through junction (PCU/hr).
Time Segment: (08:00-08:15)
Showing Analysis Set "A1 "; Demand Set "D1 - Tue 04/11/14, AM "

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Tue 04/11/14, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
Tue 04/11/14, AM	Tue 04/11/14	AM		FLAT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4				80.34	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Turners Hill Rd (N)	1	Turners Hill Rd (N)	
Snow Hill	2	Snow Hill	
Turners Hill Rd (S)	3	Turners Hill Rd (S)	
Copthorne Common Rd	4	Copthorne Common Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Turners Hill Rd (N)	0.00	99999.00		0.00
Snow Hill	0.00	99999.00		0.00
Turners Hill Rd (S)	0.00	99999.00		0.00
Copthorne Common Rd	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Turners Hill Rd (N)	3.30	6.60	11.70	17.50	60.00	4.50	
Snow Hill	3.25	4.80	18.30	21.40	52.00	32.00	
Turners Hill Rd (S)	3.10	6.70	11.50	10.70	48.00	3.00	
Copthorne Common Rd	4.00	7.20	28.00	40.00	48.00	27.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Turners Hill Rd (N)	Percentage	Increase queueing		77.60
Snow Hill	Percentage	Increase queueing		85.50
Turners Hill Rd (S)	Percentage	Increase Queueing		82.10
Copthorne Common Rd	None			

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Turners Hill Rd (N)		(calculated)	(calculated)	0.570	1280.227
Snow Hill		(calculated)	(calculated)	0.533	1153.553
Turners Hill Rd (S)		(calculated)	(calculated)	0.605	1280.925
Copthorne Common Rd		(calculated)	(calculated)	0.682	1988.958

The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Turners Hill Rd (N)	FLAT	✓	788.00	100.000
Snow Hill	FLAT	✓	563.00	100.000
Turners Hill Rd (S)	FLAT	✓	663.00	100.000
Copthorne Common Rd	FLAT	✓	1320.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	Turners Hill Rd (N)	788.00	788.00		
08:00-08:15	Snow Hill	563.00	563.00		
08:00-08:15	Turners Hill Rd (S)	663.00	663.00		
08:00-08:15	Copthorne Common Rd	1320.00	1320.00		
08:15-08:30	Turners Hill Rd (N)	788.00	788.00		
08:15-08:30	Snow Hill	563.00	563.00		
08:15-08:30	Turners Hill Rd (S)	663.00	663.00		
08:15-08:30	Copthorne Common Rd	1320.00	1320.00		
08:30-08:45	Turners Hill Rd (N)	788.00	788.00		
08:30-08:45	Snow Hill	563.00	563.00		
08:30-08:45	Turners Hill Rd (S)	663.00	663.00		
08:30-08:45	Copthorne Common Rd	1320.00	1320.00		
08:45-09:00	Turners Hill Rd (N)	788.00	788.00		
08:45-09:00	Snow Hill	563.00	563.00		
08:45-09:00	Turners Hill Rd (S)	663.00	663.00		
08:45-09:00	Copthorne Common Rd	1320.00	1320.00		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To			
		Turners Hill Rd (N)	Snow Hill	Turners Hill Rd (S)	Copthorne Common Rd
From	Turners Hill Rd (N)	0.000	56.000	229.000	503.000
	Snow Hill	58.000	0.000	21.000	484.000
	Turners Hill Rd (S)	297.000	26.000	0.000	340.000
	Copthorne Common Rd	517.000	400.000	403.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To			
		Turners Hill Rd (N)	Snow Hill	Turners Hill Rd (S)	Copthorne Common Rd
From	Turners Hill Rd (N)	0.00	0.07	0.29	0.64
	Snow Hill	0.10	0.00	0.04	0.86
	Turners Hill Rd (S)	0.45	0.04	0.00	0.51
	Copthorne Common Rd	0.39	0.30	0.31	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		Turners Hill Rd (N)	Snow Hill	Turners Hill Rd (S)	Copthorne Common Rd
From	Turners Hill Rd (N)	1.000	1.000	1.000	1.000
	Snow Hill	1.000	1.000	1.000	1.000
	Turners Hill Rd (S)	1.000	1.000	1.000	1.000
	Copthorne Common Rd	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		Turners Hill Rd (N)	Snow Hill	Turners Hill Rd (S)	Copthorne Common Rd
From	Turners Hill Rd (N)	0.0	0.0	0.0	0.0
	Snow Hill	0.0	0.0	0.0	0.0
	Turners Hill Rd (S)	0.0	0.0	0.0	0.0
	Copthorne Common Rd	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Turners Hill Rd (N)	0.97	92.02	19.21	F	788.00	788.00	823.71	62.72	13.73	837.41	63.76
Snow Hill	1.02	174.98	26.87	F	563.00	563.00	966.04	102.95	16.10	1005.23	107.13
Turners Hill Rd (S)	1.00	128.81	23.05	F	663.00	663.00	863.67	78.16	14.39	887.71	80.34
Copthorne Common Rd	0.76	8.66	3.14	A	1320.00	1320.00	180.73	8.21	3.01	180.90	8.22

Main Results for each time segment

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Turners Hill Rd (N)	788.00	197.00	744.48	845.84	820.20	0.00	812.92	669.69	0.969	0.00	10.88	40.203	E
Snow Hill	563.00	140.75	521.68	473.77	1090.92	0.00	572.18	542.83	0.984	0.00	10.33	52.747	F
Turners Hill Rd (S)	663.00	165.75	624.59	635.15	977.44	0.00	689.63	706.19	0.961	0.00	9.60	42.769	E
Copthorne Common Rd	1320.00	330.00	1308.02	1244.00	358.03	0.00	1744.61	1715.99	0.757	0.00	3.00	8.040	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Turners Hill Rd (N)	788.00	197.00	772.50	859.71	827.94	0.00	808.51	669.69	0.975	10.88	14.75	70.072	F
Snow Hill	563.00	140.75	537.85	479.95	1120.49	0.00	556.42	542.83	1.012	10.33	16.62	106.111	F
Turners Hill Rd (S)	663.00	165.75	641.68	647.45	1010.89	0.00	669.40	706.19	0.990	9.60	14.93	82.202	F
Copthorne Common Rd	1320.00	330.00	1319.63	1284.55	368.02	0.00	1737.79	1715.99	0.760	3.00	3.09	8.592	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Turners Hill Rd (N)	788.00	197.00	777.80	862.01	828.24	0.00	808.34	669.69	0.975	14.75	17.30	82.988	F
Snow Hill	563.00	140.75	541.61	480.56	1125.48	0.00	553.76	542.83	1.017	16.62	21.97	142.597	F
Turners Hill Rd (S)	663.00	165.75	645.74	649.20	1017.90	0.00	665.16	706.19	0.997	14.93	19.25	107.462	F
Copthorne Common Rd	1320.00	330.00	1319.87	1293.25	370.39	0.00	1736.18	1715.99	0.760	3.09	3.12	8.637	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Turners Hill Rd (N)	788.00	197.00	780.36	863.14	828.36	0.00	808.27	669.69	0.975	17.30	19.21	92.022	F
Snow Hill	563.00	140.75	543.40	480.84	1127.89	0.00	552.48	542.83	1.019	21.97	26.87	174.975	F
Turners Hill Rd (S)	663.00	165.75	647.78	650.03	1021.26	0.00	663.12	706.19	1.000	19.25	23.05	128.810	F
Copthorne Common Rd	1320.00	330.00	1319.93	1297.47	371.57	0.00	1735.37	1715.99	0.761	3.12	3.14	8.658	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Turners Hill Rd (N)	112.90	7.53	40.203	E	D
Snow Hill	103.65	6.91	52.747	F	D
Turners Hill Rd (S)	100.37	6.69	42.769	E	D
Copthorne Common Rd	41.33	2.76	8.040	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Turners Hill Rd (N)	194.82	12.99	70.072	F	E
Snow Hill	204.93	13.66	106.111	F	F
Turners Hill Rd (S)	187.39	12.49	82.202	F	F
Copthorne Common Rd	45.82	3.05	8.592	A	A

Queueing Delay results: (08:30-08:45)

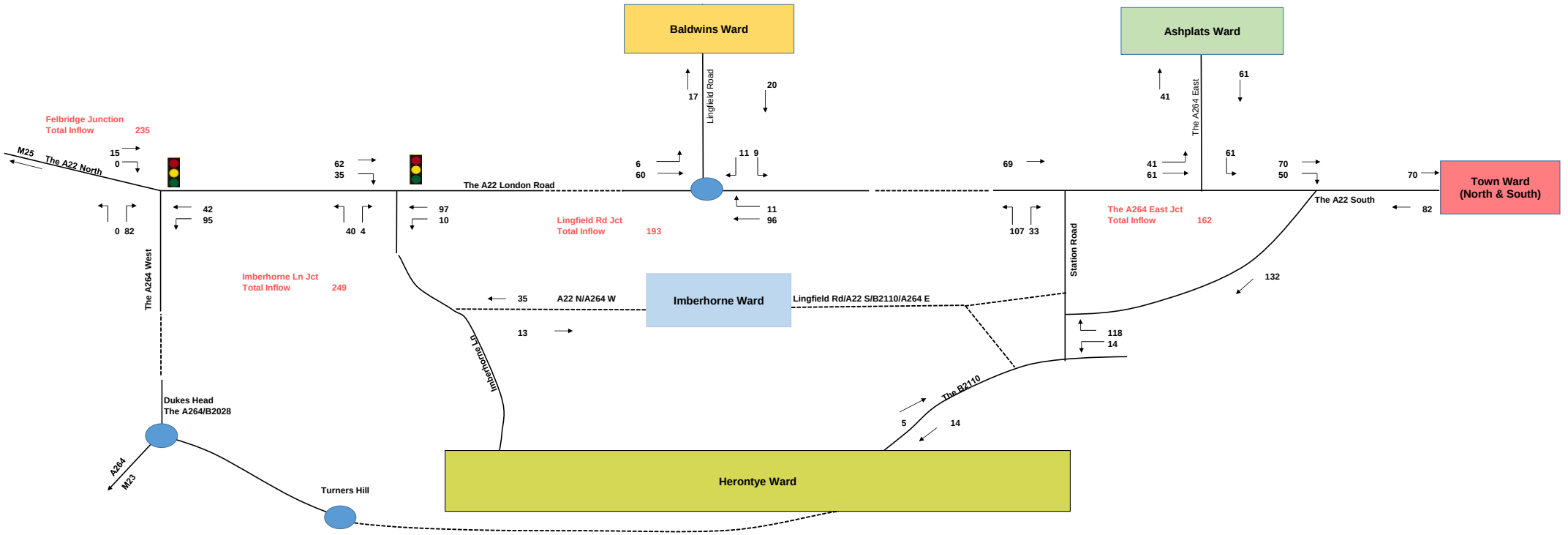
Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Turners Hill Rd (N)	241.51	16.10	82.988	F	F
Snow Hill	290.56	19.37	142.597	F	F
Turners Hill Rd (S)	257.81	17.19	107.462	F	F
Copthorne Common Rd	46.61	3.11	8.637	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Turners Hill Rd (N)	274.49	18.30	92.022	F	F
Snow Hill	366.90	24.46	174.975	F	F
Turners Hill Rd (S)	318.11	21.21	128.810	F	F
Copthorne Common Rd	46.97	3.13	8.658	A	A

Appendix 5
Increase in Traffic Flows due to Committed Development

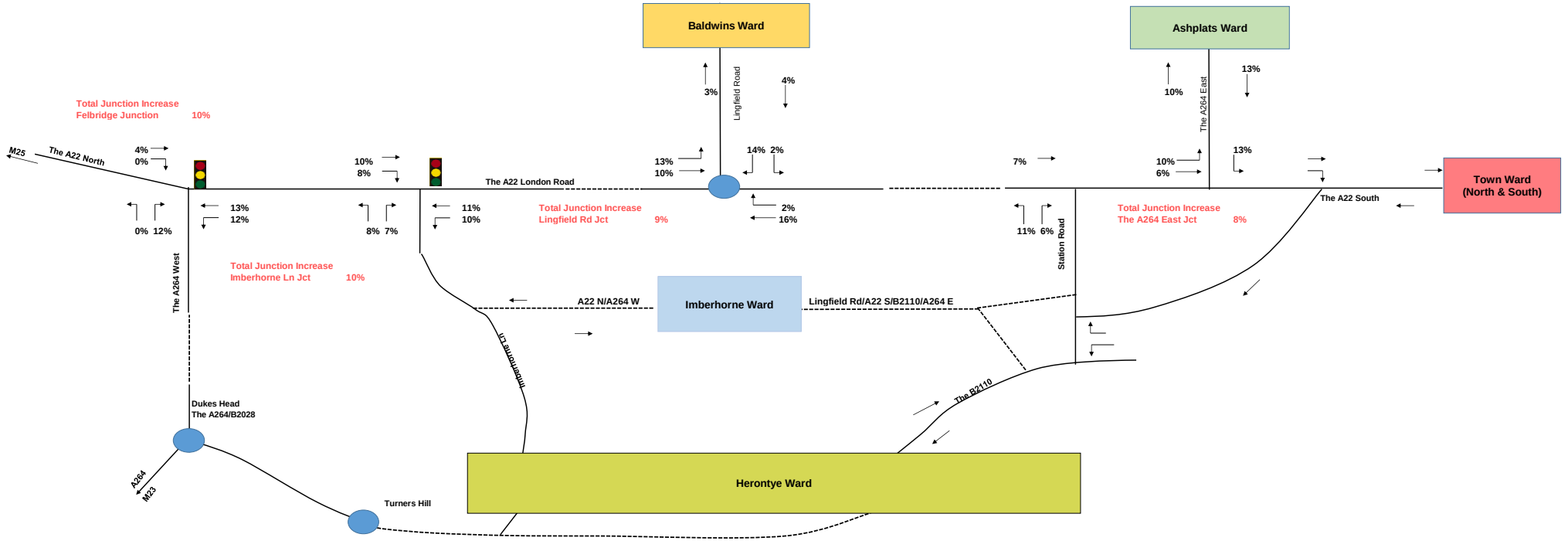
Increase in AM Peak (08:00 - 09:00) Traffic Flow from Approved EG Housing Not Built/Occupied September 2014 - Volume Increase in PCUs



Note:

1 Committed Schemes consist of 532 units identifed in MSDC Comitment Schedule 1/9/2014
2 Establishment of development traffic is in consistent with Atkins Stage 3 Study Methodology
3 Including Copthorne Village West Traffic
4 Does not include the impact of proposed Hill Place Farm Development
5 Numbers show pcu's increase over 2014 (growthed) flow level

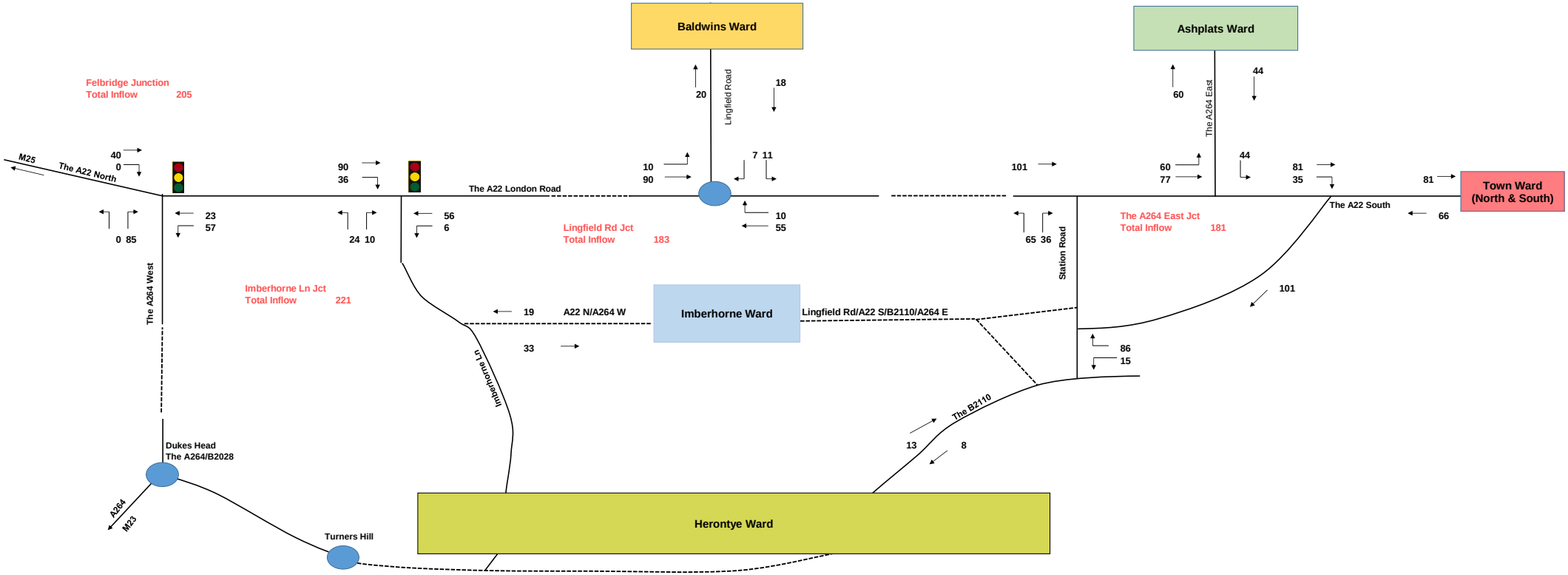
Increase in AM Peak (08:00 - 09:00) Traffic Flow from Approved EG Housing Not Built/Occupied September 2014 - Percentage Increase in PCUs



Note:

1 Committed Schemes consist of 532 units identified in MSDC Commitment Schedule 1/9/2014
2 Establishment of development traffic is in consistent with Atkins Stage 3 Study Methodology
3 Including Copthorne Village West Traffic
4 Does not include the impact of proposed Hill Place Farm Development
5 Numbers show % increase in pcus over 2014 (growthed) flow level

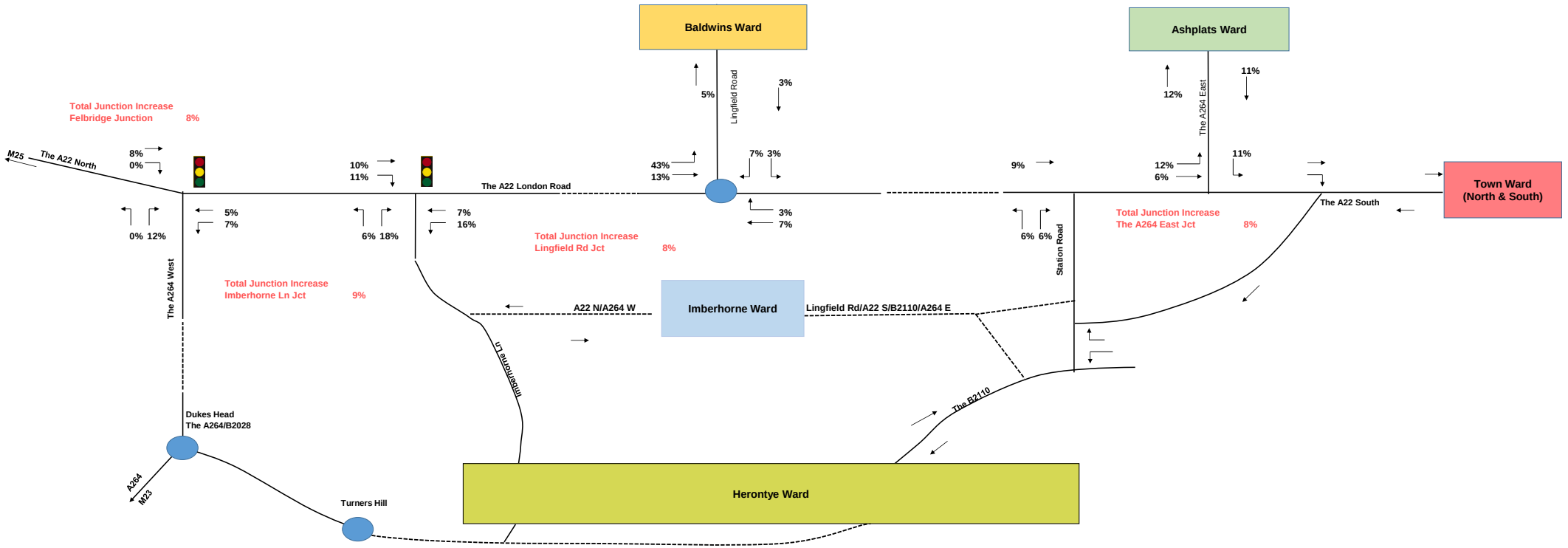
Increase in PM Peak (17:00 - 18:00) Traffic Flow from Approved EG Housing Not Built/Occupied September 2014 - Volume Increase in PCUs



Note:

1 Committed Schemes consist of 532 units identifed in MSDC Comitment Schedule 1/9/2014
2 Establishment of development traffic is in consistent with Atkins Stage 3 Study Methodology
3 Including Copthorne Village West Traffic
4 Does not include the impact of proposed Hill Place Farm Development
5 Numbers show pcu's increase over 2014 (growthed) flow level

Increase in PM Peak (17:00-18:00) Traffic Flow from Approved EG Housing Not Built/Occupied September 2014
- Percentage Increase in PCUs



Note:

1 Committed Schemes consist of 532 units identified in MSDC Commitment Schedule 1/9/2014
2 Establishment of development traffic is in consistent with Atkins Stage 3 Study Methodology
3 Including Copthorne Village West Traffic
4 Does not include the impact of proposed Hill Place Farm Development
5 Numbers show % increase in pcus over 2014 (growthed) flow level

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