



## **Eco Park Revised Scheme: FGRFC Stadium, Eastington**

Comments on Planning Application  
S.16/0043/OUT, concerning Transportation  
Matters.

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### **Contents Amendment Record**

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# 1 Introduction

1.1.1 Helix Transport Consultants Ltd are appointed by Eastington Parish Council (EPC) to review the traffic and transport implications of the proposed Eco Park Revised Scheme: FGRFC Stadium application ref: S.16/0043/OUT.

1.1.2 The comments and conclusions in this report draw on information contained in the Transport Assessment (TA) supporting the FGRFC Stadium planning application, produced by Peter Finlayson Associates (PFA), and that for West of Stonehouse (WoS), planning reference s.14/0810/OUT, also produced by PFA.

## 1.2 Overview

1.2.1 The Stadium TA considers the following development:

- 5,000 spectator capacity stadium

1.2.2 The proposed transport accommodation and mitigation works are:

- A new site access in the form of a signal controlled crossroads on the A419 between the M5 J13 and Chipman's Platt Roundabout.
- A shared footway/cycleway between Chipman's Platt and the proposed site access, and controlled pedestrian/cycle crossings across the proposed site access.
- Dualling the A419 between the M5 J13 and Chipman's Platt Roundabout.
- Match day shuttle bus services.
- A Travel Plan.

1.2.3 It is understood that the applicant has previously offered to provide traffic calming within Eastington. However, this offer is not mentioned in the current planning application.

## 1.3 Purpose and Structure

1.3.1 The purpose of this report is to look at the soundness of the evidence supporting the proposed application and, based on the available information, provide an independent view of the likely transport implications.

## 2 A419 Corridor

### 2.1 A419 Corridor Improvement Scheme (Chipman's Platt to Horsetrough)

2.1.1 The Gloucestershire Local Enterprise Partnership (GfirstLEP) announced on 7<sup>th</sup> July 2014, £4.36M government funding to improve the A419 corridor, between Stonehouse and the M5, as part of the Gloucestershire Growth Deal.

2.1.2 The need for the A419 corridor improvements is identified in GfirstLEP's Strategic Economic Plan for Gloucestershire (SEP) document. The SEP states that the aim of the A419 corridor improvements is to unlock the GREEN development in Berkeley. The SEP also states that these improvements will greatly benefit new employment at the Stroudwater Business Park and Sharpness Docks.

2.1.3 The project is currently at the Due Diligence / Business Case stage. The Business Case, produced by Amey (on behalf of Gloucestershire County Council (GCC)) in August 2017 states the following reasons for the corridor improvements:

*The key objectives which have been identified by the LEP are as follows, these also led to the provisional allocations of the funds;*

- *Facilitate delivery and sustained growth of the Gloucestershire Renewable Energy, Engineering and Nuclear (GREEN) initiative at Berkeley and surrounding locality;*
- *Provide transport enabling works to support employment expansion at the Stroudwater Industrial Estate and Sharpness Docks sites;*
- *To reduce peak period congestion on the A419 and A38*
- *To support strategic housing and employment growth sites at Stonehouse, Stroud and Berkeley;*
- *To increase capacity, optimise the efficiency of the corridor and reduce delays for general traffic, HGV's and buses, whilst also providing adequate provision for pedestrians and cyclists;*
- *To support planned growth (including on land near to the corridor), improve access to jobs and support the efficient movement of goods*

2.1.4 The FGRFC Stadium has the potential to compromise the intended purpose of the A419 corridor improvements, by adding unplanned traffic and delays.

### 2.2 A419 / Sainsbury's Interchange

2.2.1 The Stroud Local Plan Capacity Assessment Report, produced by Atkins, determined that the A419 junctions with Dudbridge Hill and Cainscross Rd require improvement

works, in order to accommodate the current local plan growth. The Atkins report concludes that:

*The proposed developments will need to fund the costs of the mitigation schemes in order for the highway network to accommodate the development.*

- 2.2.2 Regrettably, the need identified by Atkins was overlooked when the nearby major allocation site (West of Stonehouse (WoS)) was considered. The need to address these junctions is, therefore, even more acute.
- 2.2.3 The applicant's assessment demonstrates that the effect of the current EcoPark development will substantially increase the traffic demand through these junctions and, therefore, it is appropriate to require an assessment of, and mitigation scheme for, this junction. Further details are provided at section 3.4.

## 3 Highway Impact

### 3.1 Base Data

3.1.1 The following table summarises the peak hour two-way link recorded in 2012 for the West of Stonehouse (WoS) TA and the flows recorded in 2015 for the Eco Park TA.

*Table 3.1 – Peak Hour 2-Way traffic Flow Data from 2012 and 2015*

Peak Hour Link Flows	A419 West of Chipman's Platt			A419 East of Chipman's Platt			Grove Lane		
	2012	2015	Difference	2012	2015	Difference	2012	2015	Difference
AM Peak 08:00-09:00	1950	1813	-137	2147	2079	-68	180	483	303
PM Peak 17:00-18:00	2129	2299	170	2140	2229	89	116	289	173

3.1.2 Between 2012 and 2015, the traffic surveys show a marked reduction in traffic flows along the A419 in the morning peak. This is matched by a similar sized increase in the afternoon peak.

3.1.3 The available data suggests a degree of peak shifting or spreading, and diversion onto Grove Lane. It would be extremely useful if the applicants for WoS and FGRFC Stadium would share all the raw traffic survey data so that the extent to which traffic has redistributed onto Grove Lane can be determined.

### 3.2 Future Year Base Traffic

3.2.1 The future year base traffic is calculated by applying a growth factor to the 2015 survey data and adding an estimate of the WoS traffic.

3.2.2 In order to check the current estimate for WoS, Helix has undertaken an independent assessment using the trip generation rates agreed at the time between PFA and GCC and HE (Highways England), for the weekday 18:00 – 19:00 period.

3.2.3 The following matrix shows the resulting WoS weekday 18:00 – 19:00 trip generation using the methodology set out PFA's WoS TA.

*Table 3.2 – WoS Trip Generation 18:00 – 19:00 Weekday Peak based on PFA’s agreed Trip Generation Rates and Methodology.*

		Arrivals				Total
		Residential	Employment	School	Off-Site	
Departures	Residential		2	8	285	295
	Employment	4		0	37	41
	School	4	0		4	8
	Off-site	354	18	3		
	Total	362	21	11		

- 3.2.4 The above indicates that WoS is expected to generate 736 vehicles movements between 18:00 – 19:00 during the week. Of these, 701 are expected to travel on the wider network (off-site).
- 3.2.5 The current PFA EcoPark report estimates 629 total vehicle movements for WoS between 18:00 – 19:00 during the week. It cannot be determined for certain because the diagrams contained in PFA’s EcoPark TA Appendix F exclude the Oldends Lane junction with the B4008; however, only 572 vehicles appear to feature on the wider network.
- 3.2.6 It is concluded from the above that PFA’s current method for estimating WoS has resulted in an underestimate, when compared to PFA’s agreed methodology.
- 3.2.7 At around 5% of peak 2-way link flows, the degree of this underestimate should be considered to be significant, on this congested network.
- 3.2.8 The use of a growth factor is a poor substitute for the significant development already consented within the study area. Such an approach is unlikely to properly account for the quantity of future turning movements to / from the assessed corridor. Turning manoeuvres have a particular bearing on through movements at junctions and should be properly assessed.
- 3.2.9 As an illustration of the above, the recently consented Sartorius Stedim Lab Ltd (S.17/1941/FUL) was supported by a Transport Assessment produced by PFA. This PFA TA presents trip generation rates which estimate 33 new weekday movements to/from Sperry Way between 18:00 and 19:00. By contrast, PFA’s FGRFC Stadium TA method results in an estimated increase in movements to/from Sperry Way of just 2 vehicles, during the same period.

3.2.10 PFA's current methods of estimating the effect of committed development has been shown to result in a significant underestimate. This renders the assessment work carried out unreliable.

### 3.3 Network Capacity

3.3.1 Notwithstanding the above, the following reports on the traffic volumes as presented in the PFA FGRFC Stadium TA.

3.3.2 The following summarises the peak hour traffic flow predictions produced by PFA, and draws comparisons with the likely capacity, as predicted using the guidance contained in the Design Manual for Roads and Bridges Technical Advice Note TA79/99: Traffic Capacity of Urban Road.

Table 3.3 – Comparison of Predicted Traffic Flows

Link / Scenario	Weekday AM Peak (08:00 – 09:00)	Weekday PM Peak (17:00 – 18:00)	Weekday PM Peak (18:00 – 19:00)	Saturday (14:00 – 15:00)	Saturday (17:00 – 18:00)	Max Capacity 1-Way Flow (vph)	Max Capacity 2-Way Flow (vph)	Max Degree of Saturation (%)
<b>A419 (W of M5)</b>								
2024 + WoS	1152	1388						
2031 + WoS + FGRFC Stadium			1009	1636	1514	1550	2583	63%
<b>A419 (E of M5)</b>								
2024 + WoS	2229	2530						
2031 + WoS + FGRFC Stadium			2753	2582	2665	2100	3500	79%
<b>A419 (E of Chipman's Platt)</b>								
2024 + WoS	2263	2401						
2031 + WoS + FGRFC Stadium			2625	2372	2427	1470	2450	107%
<b>A419 (E of Oldend's Lane)</b>								
2024 + WoS	2112	2179						
2031 + WoS + FGRFC Stadium			2424	2210	2295	1470	2450	99%
<b>A419 (W of Horsetrough)</b>								
2024 + WoS	2165	2154						
2031 + WoS + FGRFC Stadium			2458	2272	2343	1470	2450	100%
<b>A419 (S of Horsetrough)</b>								

2024 + WoS	2435	2485						
2031 + WoS + FGRFC Stadium			2490	2480	2451	1470	2450	102%

**Key:**

*Information taken from Figures 14 & 15 from the WoS Transport Assessment produced by PFA: Title - Modelled Traffic Flows; Scenario - 2024 With Proposed Development on Land West of Stonehouse + A419 Improvements*

*Information taken from Figures 3.1,3.2 & 3.3 from the EcoPark Transport Assessment produced by PFA: Title - Modelled Traffic Flows; Scenario - 2031 Forecast Year With FGRFC Stadium*

*Assessment of the likely highway capacity has been determined from the Design Manual for Roads and Bridges Technical Advice Note TA79/99: Traffic Capacity of Urban Road.*

3.3.3 The methodology and assumptions made in applying TA79/99 to the A419 has been discussed in previous versions of this report, and is not reproduced here. Further details can be provided on request.

3.3.4 It should be noted that the effect of background traffic growth between 2024 and 2031 is nominal, at around 1% per annum. The vast majority of the change is attributable to the proposed development.

3.3.5 The analysis undertaken by PFA points to the following conclusions:

- The EcoPark development will move the busiest weekday PM Period from 17:00 – 18:00 to 18:00 – 19:00; thereby, creating a 2hr evening peak period, when matches occur.
- The effect of the stadium during a Saturday match-day will be to create 2 new periods where traffic levels are commensurate with the weekday peak hours.
- The comparison with TA79/99 indicates that the traffic demand on the A419 will be at the limit of its capacity, during the normal peak periods, as a result of WoS. The effect of FGRFC Stadium will be to recreate new periods of full saturation whenever it is operational.

3.4 **Micro Simulation Modelling Inputs**

3.4.1 The mixture of traffic flow outputs produced by PFA, whether it be 1-way or 2-way or 1 hour or 3 hour, make direct comparisons between the various reports they have produced somewhat challenging.

3.4.2 The qabove is considered significant because of the need to examine th relationship between modelled and demand flows. To these ends Helix have undertaken a limited interrogation of the micro-simulation modelling provided by the applicant.

3.4.3 The following table compares the weekday base 17:00 – 18:00 peak hour traffic flows, provided for a previous version of the Eco Park development, with the micro-simulation modelled outputs for the same time period.

*Table 3.4 – Movements to/from Oldends Lane Roundabout 17:00 – 18:00*

Scenario / Arm	Information taken from PFA Eco Park, August 2016, report for Base + Growth + WoS		Information derived from preceding columns plus 6% additional Growth		Information taken from the PFA microsimulation model		Difference between the two 2031 assessments	
	2025		2031		2031			
	To	From	To	From	To	From	To	From
A419 (W)	1157	1491	1226	1580	1292	1611	66	31
A419 (E)	933	1269	989	1345	1088	1450	99	105
Oldends Lane	576	276	611	293	639	299	28	6
Bonds Mill	208	11	220	12	190	13	-30	1
Sperry Way	189	14	200	15	177	13	-23	-2

3.4.4 The differences are even more stark when compared with the modelled 17:00 – 18:00 flows presented on Figure 15 of the PFA WoS report of March 2014. This shows 2025 A419 2-way link flows of 2401 west of Oldends Lane and 2179 to the east of Oldends Lane. These figures can be growthed to 2031 by adding 7%. This results in 2569 and 2332 respectively.

3.4.5 The above highlights 2 issues. Firstly, there is substantially more traffic in the model on the A419, in the weekday PM Peak, than any scenario tested or approved for WoS. These discrepancies appear to suggest a major error in inputting demand into the model for the 17:00-18:00 period.

3.4.6 Secondly, the micro-simulation model appears to underestimate the movements from Bonds Mill and Sperry Way. These movements will conflict with the principal movement, along the A419, and are therefore potentially very significant.

3.4.7 The overall conclusion is that there appear to be significant issues with the way in which base, committed and proposed traffic flows have been modelled. It is considered that the applicant should provide much greater clarity over what is being tested and how those numbers were derived, before the modelling can be considered robust.

### 3.5 **A419 Junctions with Dudbridge Road and Cainscross Road**

3.5.1 Analysis, carried out by Atkins for Stroud District Council, presented as evidence for the 2015 Local Plan, concluded that the A419 junction with Dudbridge Hill and Cainscross Rd would be overcapacity as a result of the local plan development allocations. The Atkins report states that local plan allocation sites need to fund the cost of improvements.

3.5.2 The above advice was not acted upon when the nearby major allocation site (WoS) was considered and thus, unlike the rest of the A419, there are no funded improvement proposals for these junctions.

3.5.3 The proposed FGRFC Stadium development is assessed to result in a concentrated tidal flow of traffic from / to the Stroud area. This is shown in the weekday arrival northbound movements approaching the Horsetrough Roundabout. The table below compares this movement with that assessed by Atkins, in their Capacity Assessment report.

*Table 3.5 – Comparison between predicated future year traffic volumes on the Northbound Approach to Horsetrough Roundabout*

<b>Scenario</b>	<b>Weekday Peak Hour northbound traffic volumes approaching the Horsetrough Roundabout</b>
2031 + Local Plan allocations As considered by Atkins (weekday PM Peak 17:00 – 18:00)	1257
2031 + Local Plan allocations + FGRFC Stadium As considered in current application (weekday PM Peak 18:00 – 19:00)	1368
<b>Difference (%)</b>	<b>+8.7%</b>

3.5.4 The table above shows that the FGRFC Stadium is assessed to result in a near 9% increase in traffic, over and above the tested for the current local plan allocations. The vast majority of this additional traffic will travel through the A419 Junctions with Dudbridge Road and Cainscross Road. It follows that 9% more traffic through a junction assessed to be overcapacity, will create a substantial impact.

3.5.5 According to the above these junctions cannot accommodate the increase in traffic without improvements. In practice, without improvements, the extra traffic demand will result in much larger queues at these junctions and / or rat-running along alternative routes.

3.5.6 Given that the greatest concentration of local support for FGRFC is within the Nailsworth/Minchinhampton area, a likely outcome, without improvements to the junctions in Stroud, is significant rat-running along Nymphsfield Rd, Frocester Hill and through Eastington.

### 3.6 Micro Simulation Modelling Outputs

3.6.1 The following table compares the PM Peak drive-time results from the Paramics microsimulation modelling carried for FGRFC Stadium, with the modelling carried out for the WoS proposals.

*Table 3.6 – Comparison between predicated Drive Times between the A419 / A38 and Horsetrough Roundabout Junctions.*

Scenario	PM Peak		Source
	Eastbound	Westbound	
2024 with WoS + A419 Improvements (17:00 – 18:00)	09:39	07:16	Table 7.5 PFA WoS TA
2031 with WoS + EcoPark + A419 Improvements (18:00 – 19:00)	07:30	07:14	Table 6.27 PFA EcoPark TA

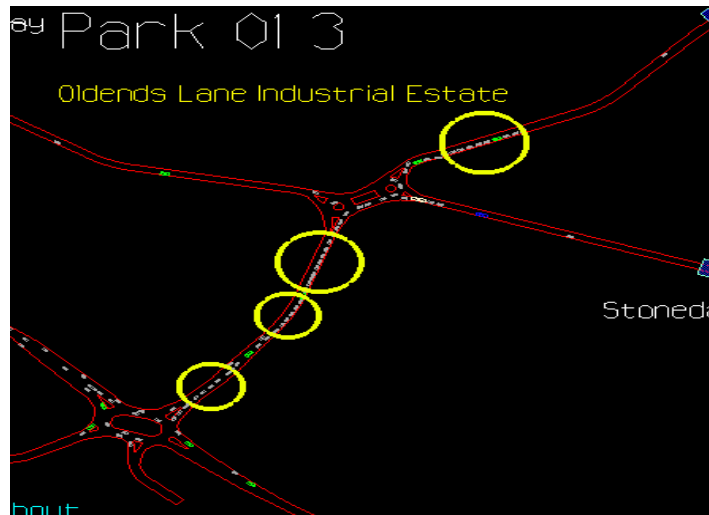
3.6.2 It has been established that the predicted weekday afternoon traffic flows on the modelled section of the A419 are higher between 18:00 – 19:00, with EcoPark, than the period 17:00 – 18:00 without EcoPark.

3.6.3 Roadworks associated with proposed EcoPark are currently limited to a short section of dual carriageway and a new junction. There are understood to be no other proposed improvement works over and above those assessed for WoS.

3.6.4 Given the above it is surprising that the assessed effect of more traffic and one more junction is a reduction in drive times. It would help consideration of this application if specific comments could be made on this unexpected benefit of EcoPark.

3.6.5 Perhaps part of the reason for the above is the way in which the link through WoS is missing from the modelled network. When WoS planning application was under consideration, this link was identified as a benefit, by the local highway authority, as it could allow for the redistribution of A419 trips. Because this latest model does not allow for redistribution, there is significant concern that the outputs are unrealistic.

- 3.6.6 The following snapshot, from the PFA micro simulation model, shows a very long queue from the Stroudwater Business Park. Under the circumstances diversions between Chipmans Platt and the B4008 seem inevitable.



- 3.6.7 This report considers the Oldends lane link to the B4008 to be a key, and yet highly sensitive, component to the operation of the existing employment and the WoS allocation site. The absence of this route renders the analysis incomplete.
- 3.6.8 It should be acknowledged that the Stroudwater Business Park is largely operational during the assessed football match periods.
- 3.6.9 A further, major, concern is the treatment of the proposed signal controlled pedestrian crossing at the improved Oldends Lane / A419 junction. This is the essential crossing point for east-west movements and is already well used by Bond's Mill workers and Eastington School children. Combined with PFA's expectation that the site will attract 170 walkers and cyclists from the local area, this crossing will be in very regular use during the peak EcoPark periods. The micro simulation model allows a period of 16 seconds for the crossing to operate. This appears insufficient for the minimum mandatory signal timings. When considering the crossings potential to extend during periods of peak demand, this time allowance is considered to substantially underestimate the time vehicles will be held up.
- 3.6.10 A further major concern is the apparent absence of any modelled pedestrian demand at the proposed site access. If, as expected, this crossing is configured to extend the pedestrian green time during peak demand, it will undoubtedly affect the traffic flow. It is doubtful that the minimum green times assumed in the Lisig model is adequate for the likely peak volume of pedestrian movements (see also section 3.7)

### 3.7 Stand Alone Junction Modelling

3.7.1 The results of the stand-alone junction modelling are considered to have limited value because:

- these models cannot account for exit blocking.
- there appears to be no adjustments made for unequal lane utilisation.
- It appears that the all-red cycle crossing phase at the Downton Road signals has been ignored.
- There appears to be no allowance made for the effect of a signal controlled crossing on the operation of the improved Oldends Lane / A419 junction.

3.7.2 The net result of the above is to present an overly optimistic outcome.

3.7.3 Notwithstanding the above, the stand-alone modelling has highlighted a number of areas of concern. The following identifies links where the Ratio of Flow to Capacity (RFC)/ Degree of Saturation (DoS) exceeds 85%; this being generally considered the desirable maximum.

*Table 3.7 – Junction Arms assessed to exceed the recommended maximum Degree of Saturation / Ratio of Flow to Capacity*

Period	Arm	RFC / DoS (%)
<b>Chlpmans Platt Roundabout</b>		
Saturday 14:00 – 15:00	A419 South East	100%
Saturday 17:00 – 18:00	A419 North West	91%
Weekday 18:00 – 19:00	A419 South East	92%
<b>Oldends Lane Roundabout</b>		
Saturday 14:00 – 15:00	A419 East	90%
Saturday 17:00 – 18:00	A419 West	92%
Weekday 18:00 – 19:00	A419 East	89%
<b>Downton Road Signals</b>		
Saturday 17:00 – 18:00	A419 (W) Ahead and Right	97.4%

	Downton Road	94.2%
<b>Horsetrough Roundabout</b>		
Saturday 17:00 – 18:00	A419 Bristol Road	102%

3.7.4 The above points to problem areas. It is expected that, if the issues identified in 3.7.1 were addressed, the models would predict a substantially worse outcome.

### 3.8 Access Proposals

3.8.1 The access arrangement would benefit from further consideration of the needs of pedestrians and cyclists.

3.8.2 The nature of the proposed development means that there will be a large number of pedestrian and cycle movements over a relatively short period of time. However, the proposed refuge islands appear small and there is no more standing area either side of the crossing than standard geometry allows.

3.8.3 The pedestrian crossing is separated across two phases of the lights. Depending on the prevailing traffic conditions one of these phases will be at the absolute minimum of either 6 or 8 seconds per cycle. It seems unlikely that this will be sufficient for the peak pedestrian demand.

3.8.4 Furthermore, the modelling indicates that the preceding phases of the pedestrian crossing can be over 40 seconds per 120 second cycle. This could allow the central reserves to fill with substantial numbers of people.

3.8.5 The above points to the potential for pedestrians to overspill the refuge islands and / or abuse the traffic signals.

3.8.6 It is recommended that pedestrian demand is given further consideration.

### 3.9 Parking

3.9.1 Confirmation should be sought from the applicant that the proposed parking on the site will be free of charge. If not, parking on Springhill, Grove Lane and the WoS access road will be inevitable. The A419 verge is also considered vulnerable to fly-parking.

3.9.2 The proposed parking provision is just 0.34% below the estimated parking need. This leaves virtually no contingency for the possibility that walkers or cyclists or public

transport users or car occupancy levels have been overestimated. Consideration should be given to providing an overflow parking area within the site.

### 3.10 **Construction Impacts**

3.10.1 The FGRFC Stadium proposals involve widening on both sides of an existing single carriageway. Given the current constraints it is unlikely that this can be achieved quickly and efficiently next to two live lanes. Diversions via Claypits Road and Grove Lane are a possibility, if cost is prioritised. It would be appropriate at this stage to seek reassurance from the Highway Authority that such diversions would be considered unacceptable.

3.10.2 The applicant's acknowledgement that hours of operation and vehicle routing restrictions will likely apply is welcomed.

## 4 Sustainable Development

### 4.1 Walking & Cycling

4.1.1 The proposal, to provide a shared footway / cycleway up to a Toucan crossing over the A419, makes a positive contribution to Eastington's connectivity and the national cycle route 45's continuity.

4.1.2 The FGRFC Stadium TA presents an exaggerated impression of the site's potential walk (2Km) and cycle (5Km) catchment. In reality it is remote from the people it is intended to attract. According to the FGR ticket sales information 91.5% of home supporters are outside the GL10 area. Clearly public transport access is the significant potential sustainable travel choice.

### 4.2 Public Transport

#### Regular Bus Services

4.2.1 There are no proposals to divert an existing, or provide a new, regular scheduled bus service to the site. At over 400m from any existing bus stops, the proposed stadium cannot be said to be near to an existing regular service.

4.2.2 In recognition of the above the applicant proposes an unspecified shuttle bus service to operate during football matches.

4.2.3 Policy permits development on unsustainable sites, if sustainability is built into the proposals. Given the site's remote location regular public transport (bus) access should also be considered essential. The current proposition is time limited. This puts into question the policy compliance of a land allocation which is unrestricted.

#### Match Day Shuttle

4.2.4 A shuttle bus service to Stonehouse Station for football supporters may not be practical. The approach roads are not suited to buses. This is demonstrated by the fact that bus diversion services stopping on Bath Road. Bath Road could not accommodate a bus waiting to pick up football fans, for any length of time, without causing significant problems in Stonehouse High Street and at the Horsetrough Roundabout

4.2.5 Cam and Dursley Station has better infrastructure to cope, but is not without its own challenges.

4.2.6 A shuttle bus service collecting both mainlines at Gloucester is possibly a better proposition for visiting fans.

## 5 Summary & Conclusions

- 5.1.1 The proposed FGRFC Stadium is assessed to add a significant amount of traffic to the A419 corridor. The accompanying Transport Assessment indicates that weekday evening football matches will result in traffic volumes in 2031 between 18:00-19:00 exceeding those expected to occur, following Local Plan lead growth, during the traditional weekday evening peak period of 17:00 – 18:00.
- 5.1.2 On Saturdays, the effect of the proposed development will be to create two peak hour long periods where traffic volumes are comparable to the normal weekday peak hours.
- 5.1.3 There are a number of significant concerns with the technical assessment carried out in support of the FGRFC Stadium. These are summarised below:
- Significant underestimation of the trips associated with committed development;
  - Inability for the microsimulation model to assess the impact on the Oldend's Lane / WoS corridor between the B4008 and Chipmans Platt;
  - Absence of pedestrian demand modelling;
  - Lack of consideration of the proposed development's significant impacts at the A419's junctions with Dudbridge Hill and Cainscross road;
- 5.1.4 In the case of the last point, the information that has been prepared and presented in the FGRFC Stadium TA suggests an outcome that may be unachievable. If the constraint within Stroud is not addressed a significant amount of rat-running along Nypsfield Road, Frocester Hill and through Eastington seems inevitable.
- 5.1.5 The absence of the Oldends Lane Link between Chipmans Platt and the B4008 is a major oversight. This corridor is recognised as a key component in the mitigation and justification of WoS allocation site. The proposed football stadium development will add significant demand on this link during the Stroudwater Estate's business hours, and the effect of this should be tested.
- 5.1.6 For all the reasons given above the transport modelling currently presented cannot be considered sound.
- 5.1.7 The site is not considered to be in a sustainable location. The 'real world' walk and cycle catchment is much more limited than it is shown to be on the simplistic plans

included in the FGRFC Stadium TA. Furthermore, the site is remote from the vast majority of the FGRFC fan-base.

5.1.8 Planning policy allows for development in unsustainable locations if sustainability is built in. In this respect the proposed FGRFC Stadium development mitigation strategy is time-dependant. Specifically, bus access will only be provided during football matches.

5.1.9 The FGRFC Stadium TA indicates that there will be no movements to or from the site before 18:00 on a Tuesday or outside of the 14:00 – 18:00 Saturday period. In order to: ensure that no activities occur when the site is unsustainable; to safeguard the weekday 17:00 – 18:00 evening peak period from an unassessed impact; and, minimise the conflict with the Stroud Saturday retail period, it would seem entirely appropriate to require that no activity occurs on the site outside of the assessed periods.