

**P/2010/00255**



RECEIVED  
-4 MAR 2010

APPENDIX G2  
Transport Assessment (June 2001)

---

**Football  
Association**

**National Football  
Centre**

**Transport  
Assessment**

**June 2001**

**WS/Atkins**

**ENGLAND FOOTBALL  
ENTERPRISES LIMITED**

**NATIONAL FOOTBALL  
CENTRE**

**BYRKLEY PARK,  
BURTON-ON-TRENT,  
STAFFORDSHIRE**

**TRANSPORT  
ASSESSMENT**

**June 2001**

**WS/Atkins**

FINAL VERSION

# England Football Enterprises Limited

**National Football Centre  
Byrkley park, Burton-Upon-Trent, Staffordshire**

## Transport Assessment

**June 2001**

JOB NUMBER:		DOCUMENT REF: #788177 v1 - FA TRANSPORT ASSESSMENT			
Revision	Purpose / Description	Prepared by	Checked by	Approved by	Date
2	Report for submission to SCC and ESBC	Dan Okey	Alan Nicholls	FA	27/3/01
3	Final Report	Dan Okey	Alan Nicholls	AGN/FA	30/5/01
WS ATKINS CONSULTANTS LTD Auchinleck House, Five Ways, Birmingham, B15 1DJ Tel 0121 643 9621, Fax 0121 643 9688					

All enquiries regarding this report should be directed to:  
**Dan Okey**

# CONTENTS

1.	INTRODUCTION	3
2.	SITE AND EXISTING TRANSPORT CONDITIONS	4
3.	THE PROPOSAL	6
4.	TRIP GENERATION	8
5.	TRIP DISTRIBUTION AND ASSIGNMENT	15
6.	TRAFFIC IMPACT	18
7.	CONCLUSIONS	24

## List of Tables

Table 4.1 - Monday to Friday Trip Pattern – Worst Case Scenario	10
Table 5.1 – Origin of Trips to Site (Players)	15
Table 5.2 – Trip Assignment Pattern (Players, coaches and their staff)	16
Table 6.1 – Proportional increase in traffic on Surrounding Roads	18
Table 6.2 – Summary of Impact on Surrounding Roads and Junctions	19
Table 6.3 – Proportional Increase in traffic movements at Five Lanes End Junction	20

## List of Figures

- 2.1 Site Location Plan
- 2.2 Base (2004) Daily Traffic Flows
- 2.3 Base (2004) AM Peak Traffic Flows
- 2.4 Base (2004) AM Off Peak Traffic Flows
- 2.5 Base (2004) PM Peak Traffic Flows
- 2.6 Base (2004) PM Off Peak Traffic Flows
- 5.1 Proportional Distribution of 'Players' Trips
- 5.2 Proportional Distribution of Office based and Permanent Residential Trips
- 5.3 Development Traffic Flows - DAILY
- 5.4 Development Traffic Flows – AM Peak
- 5.5 Development Traffic Flows – AM Off Peak
- 5.6 Development Traffic Flows – PM Peak
- 5.7 Development Traffic Flows – PM Off Peak
- 6.1 Base (2004) Five Lanes End Turning Movements – DAILY
- 6.2 Base (2004) Five Lanes End Turning Movements – AM Peak
- 6.3 Base (2004) Five Lanes End Turning Movements –AM Off Peak
- 6.4 Base (2004) Five Lanes End Turning Movements –PM Peak
- 6.5 Base (2004) Five Lanes End Turning Movements –PM Off Peak

## List of Appendices

**Appendix 1** Site Access PICADY - Full Junction Output 2004

**Appendix 2** Site Access PICADY – Full Junction Output 2019

# 1. INTRODUCTION

- 1.1 Proposals exist to provide a 'National Football Centre' at Byrkley Park, Needwood, near Burton-on-Trent. This facility will be used by the England football team in preparation for international matches as well as being a training centre in full time use for other squads and educational courses.
- 1.2 WS Atkins have been commissioned by the Football Association to undertake a Transport Assessment of the proposals and prepare this report in support of a full planning application to be submitted to East Staffordshire Borough Council. Meetings with both East Staffordshire Borough Council and Staffordshire County Council (the Highway Authority) have been held during its preparation.
- 1.3 This report will consider the likely transport impact of the proposal and any mitigation measures which may be required.

## 2. SITE AND EXISTING TRANSPORT CONDITIONS

### *Description of Site and Access*

- 2.1 The site is situated at Byrkley Park in Needwood, approximately 7 km west of Burton town centre. A location plan is shown in Figure 2.1. Access to the site will be managed by a new priority junction onto the B5234, a 60 mph single carriageway road running between the A515 to the west and B5017 to the east. There is no pedestrian footway on the B5234 and no bus services pass the site. Due of the location of the site and nature of the facility, it is likely that the majority of trips to and from the site will be by private car, private mini-bus or coach.

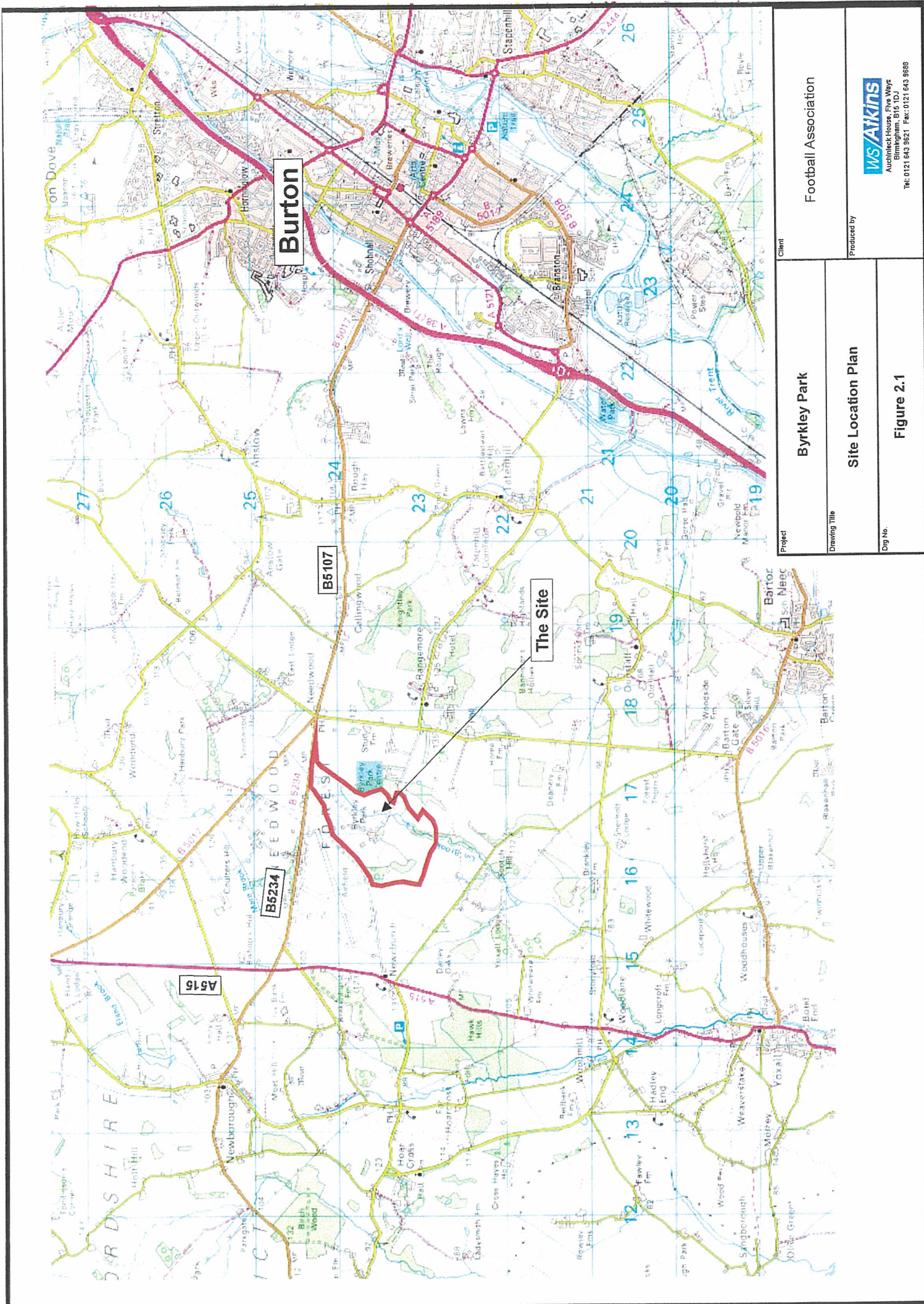
### *Traffic Flows on Surrounding Roads*

- 2.2 Available traffic flow information was obtained from Staffordshire County Council. As some of this data was collected in 1997 and 1998, the County Council advised on applying 1997 NRTF Central Growth factors to derive an accurate estimate of 'base' flows. As the development will open in 2004, all flows were factored accordingly. 'Base' flows are shown in Figures 2.2 to 2.5. As can be seen, the two-way daily traffic flow on the B5234 will be 2,800 vehicles, while the A515 north of the B5234 will carry 3,484 vehicles and the B5017 to the east 5,599 vehicles.

### *Accidents and Road Safety*

- 2.3 Accident data for the roads and junctions surrounding the site was purchased from Staffordshire County Council. Discussion with the Council revealed that one junction in particular, known as the Five Lanes End Junction (a five way priority junction off the B5017 / B5234 / Needwood Road / Tutbury Road), is known to have a poor safety record. A legal agreement entered into by Forte (U.K.) Limited in 1992 in respect of the previous planning permission for a 150 bed hotel, two 18 hole golf courses, leisure/conference facilities and 29 houses on this site (originally granted in 1991) required a financial contribution of £250,000 towards creating a roundabout at this junction. This permission was never implemented and since that time no action has been taken by the Council to introduce safety measures, despite growing evidence of an accident problem.





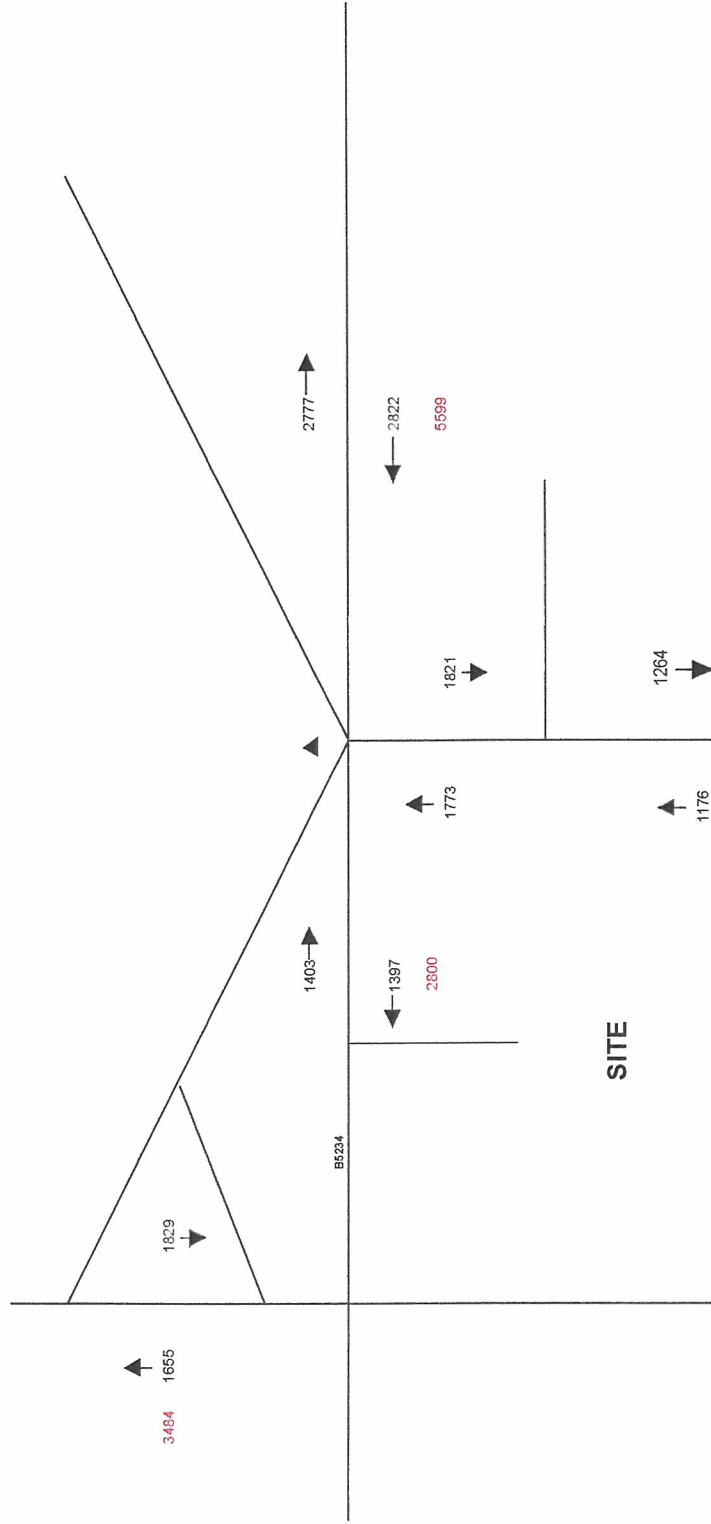
Project	Byrkley Park	Client	Football Association
	Site Location Plan		Produced by
Drawing Title	Figure 2.1		
Dwg No.			


- 2.4 Accident records show that 16 accidents have taken place at the junction within the last 5 years, 14 of which were slight, 1 serious and 1 fatal. The number of accidents has increased steadily each year during this time, with 1 accident in 1995 and 1996, 2 each in 1997 and 1998 and 4 each in 1999 and 2000. The majority of accidents (12 out of 14) occurred during daylight hours in fine weather conditions with dry road conditions. Such preliminary evidence points to factors other than daylight and weather conditions as contributing to the cause of the accidents.
- 2.5 During a site visit on Friday 16<sup>th</sup> February 2001 an inspection of the roads surrounding the site was carried out. At the Five Lanes End junction, visibility from the stop line of Needwood Road is restricted by the New Inn B&B to the East and by dense foliage to the West. Visibility from the give way markings of the B5017 Burton Road (West) and C18 Tutbury Road is also limited due to foliage and road alignments (although not to the same extent as Needwood Road). In addition to limited visibility from side roads, the proximity of two give ways and one stop line can lead to confusion over who has right of way when more than one vehicle arrives at the same time.

All Day, 2004

Growth Factors

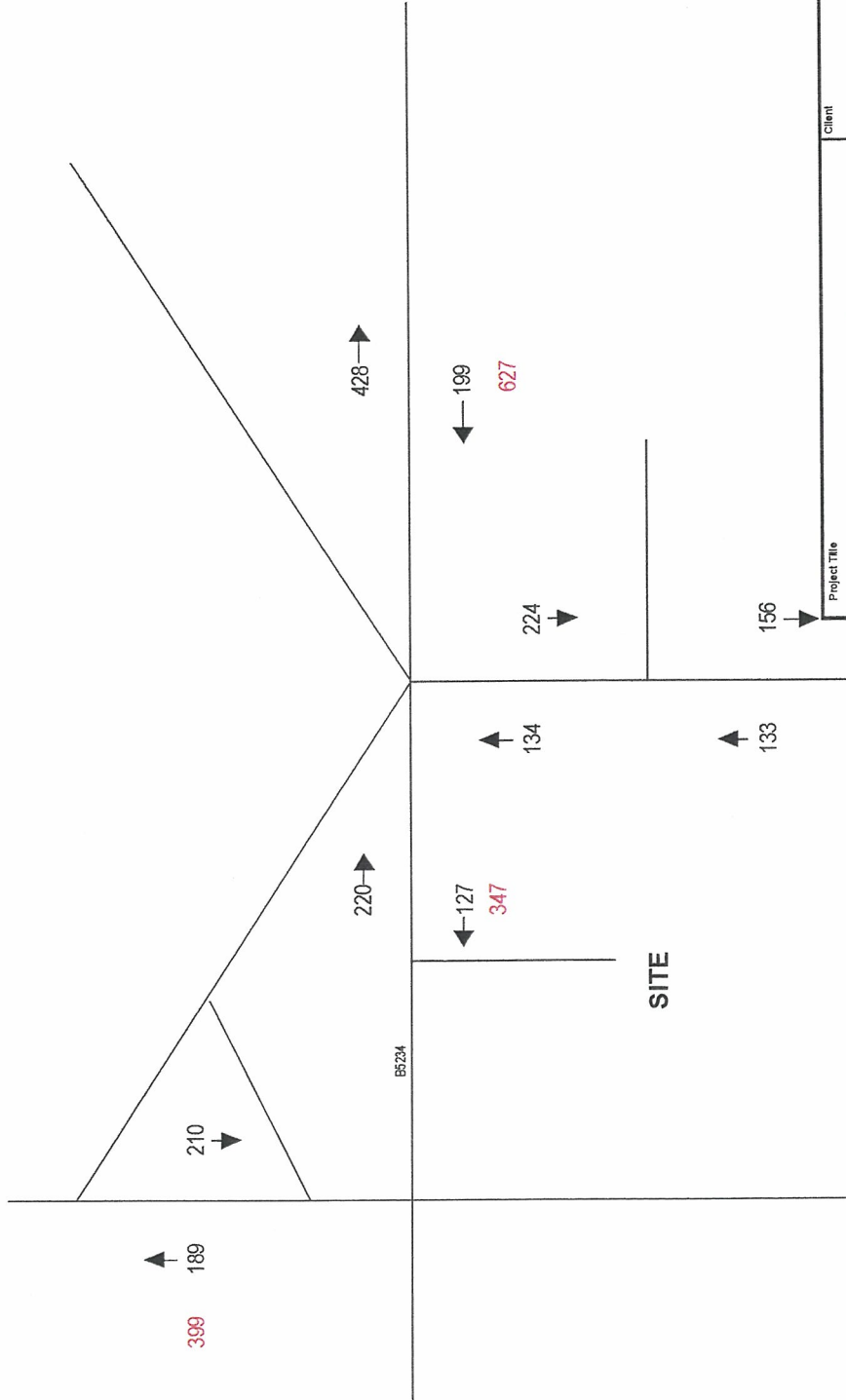
2000 >> 2004	1.070
1998 >> 2004	1.107
1997 >> 2004	1.127



Project Title	Byrkley Park	Client	Football Association
Drawing Title	2004 Base Daily Traffic Flows		
Dwg No.	Figure 2.2		
Produced by		 WS Atkins Auchinleck House, Five Ways Birmingham, B15 1DJ Tel: 0121 643 9621 Fax: 0121 643 9669	

AM Peak, 2004

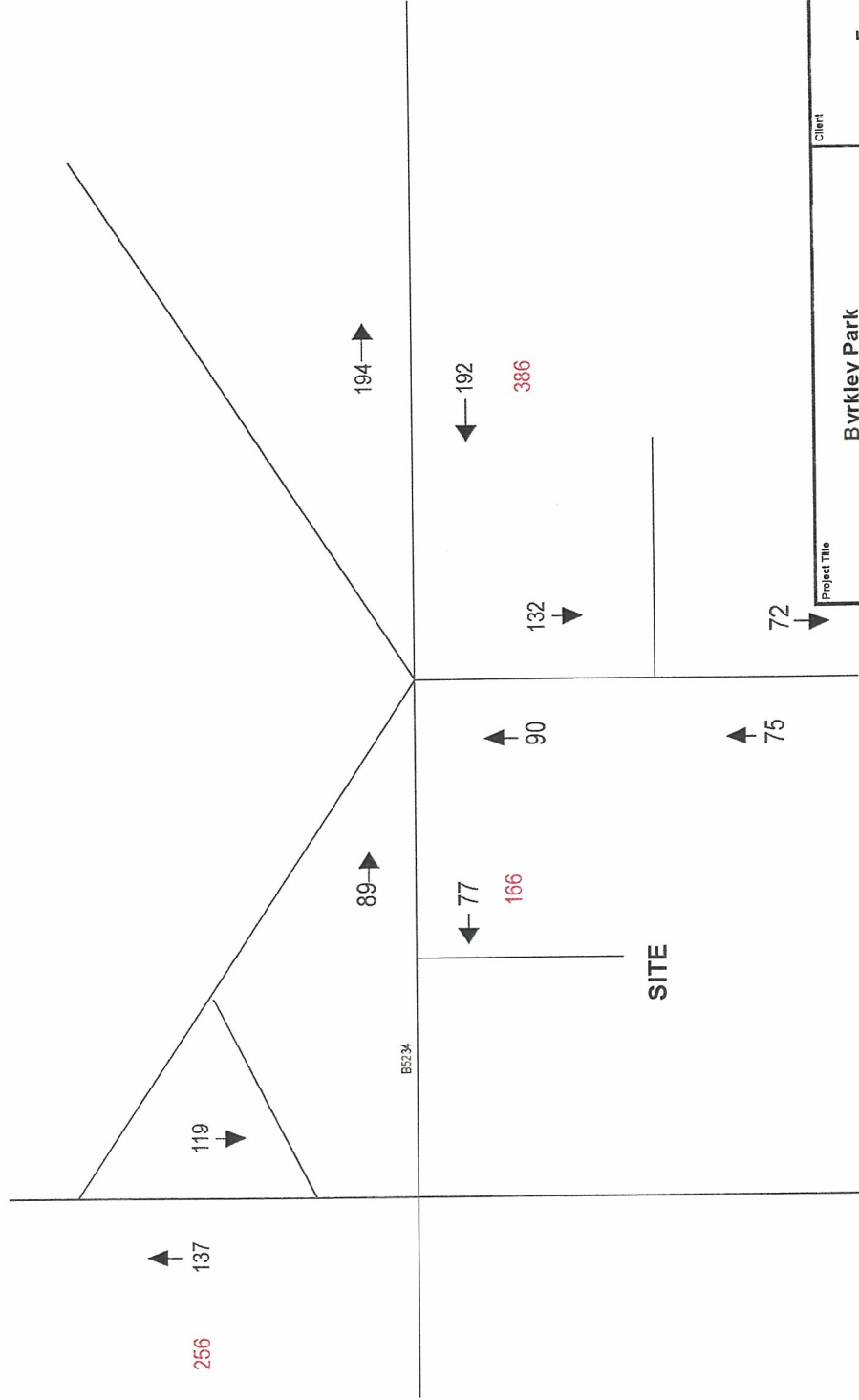
Growth Factors	
2000 >> 2004	1.070
1998 >> 2004	1.107
1997 >> 2004	1.127




Project Title <b>Barkley Park</b>	Client Football Association	
		Drawing Title <b>2004 AM Peak Traffic Flows</b>
		Dig No. <b>Figure 2.3</b>

AM Off Peak, 2004

Growth Factors	2000 >> 2004	1.070
	1998 >> 2004	1.107
	1997 >> 2004	1.127

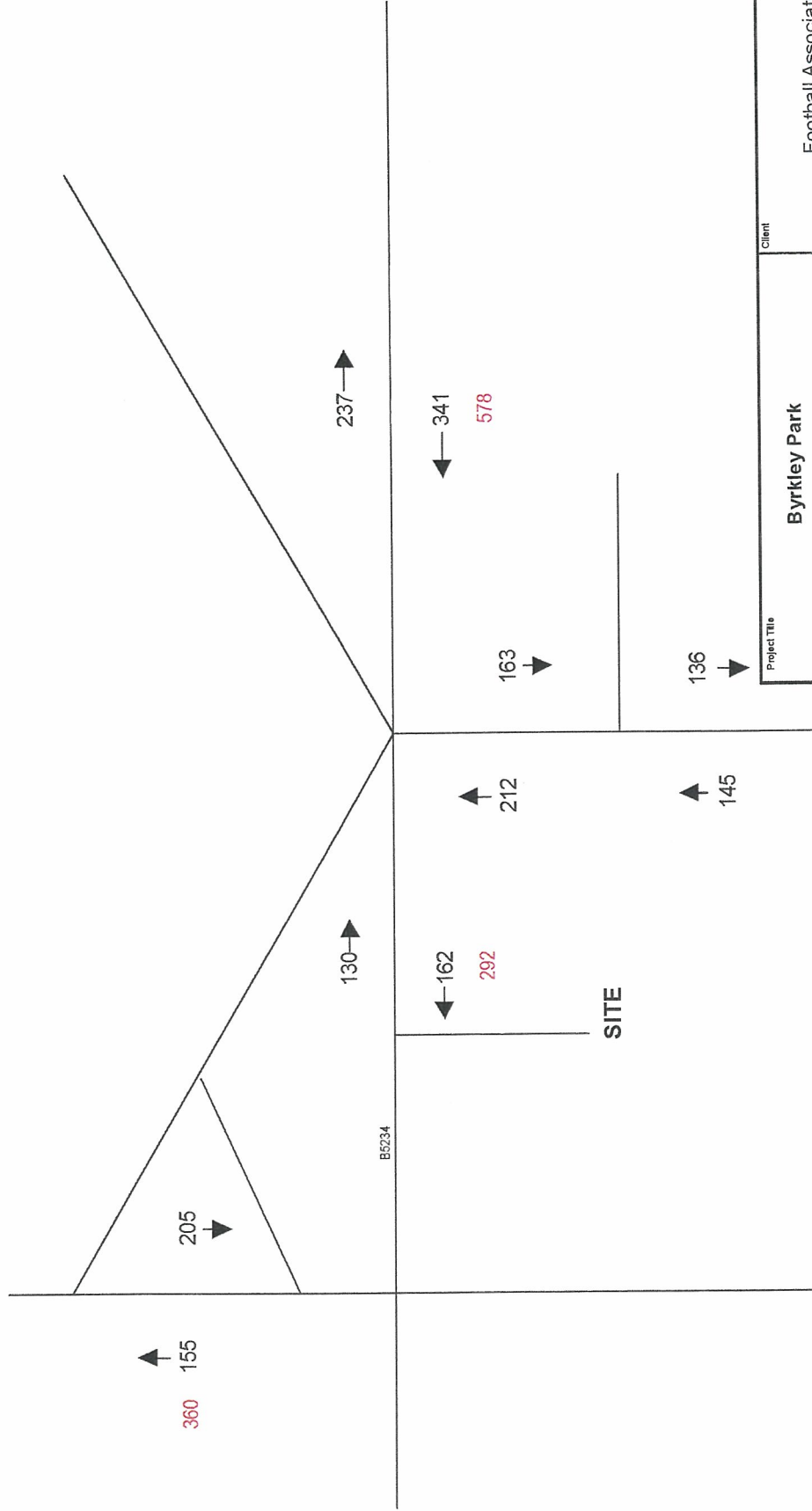


Project Title	Byrkley Park	Client	Football Association
Drawing Title	2004 AM Off Peak Traffic Flows		
Dig No.	Figure 2.4		
Produced by			
 Auchinleck House, Five Ways Birmingham, B15 1DJ Tel: 0121 643 9621 Fax: 0121 643 9699			

PM Peak, 2004

Growth Factors

2000 >> 2004	1.070
1998 >> 2004	1.107
1997 >> 2004	1.127



Project Title

Byrkley Park

Client

Football Association

Drawing Title

2004 Base PM Peak Traffic Flows

Produced by

**WS/Atkins**

Auchinleck House, Five Ways  
Birmingham, B15 1DJ  
Tel: 0121 643 9621 Fax: 0121 643 9688

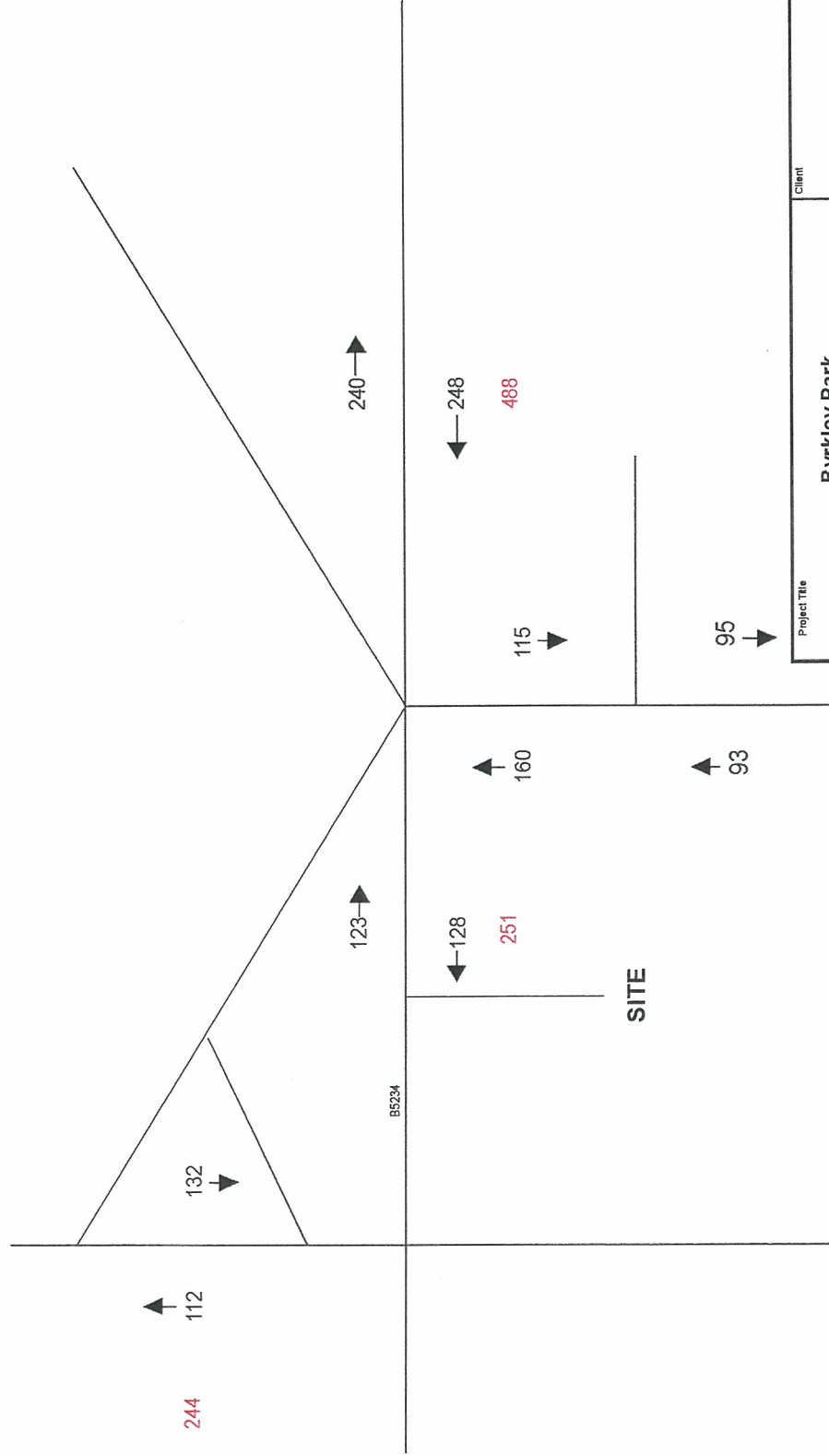
Dwg No.

Figure 2.5

PM, Off Peak 2004

Growth Factors

2000 >> 2004	1.052
1998 >> 2004	1.089
1997 >> 2004	1.108



Project Title	Byrkley Park	Client	Football Association
	Drawing Title		2004 Base PM Off Peak Traffic Flows
Dig No.	Figure 2.6	Architects House, Five Ways Birmingham, B15 1DJ Tel: 0121 643 9621 Fax: 0121 643 9680	

### 3. THE PROPOSAL

#### *Facilities*

3.1 To provide a 'National Football Centre' to be used for education courses as well as individual teams, including the senior international squad. Facilities to include:

- Short term residential accommodation for players and students comprising 150 bedrooms (rooms can be used as twin rooms)
- Ancillary recreational facilities and dining areas
- One indoor training pitch
- Outside training pitches
- Fitness centre, including area for sports medicines (not research)
- Teaching/Seminar facility
- Ancillary offices for 75 staff (living off site)
- 3 dwellings for staff

3.2 The facility is to be in full time use throughout the year, with the twelve international squads meeting maybe 3 or 4 times a year each. Any squad using the facility will include staff up to a maximum of 50 people in total.

#### *Proposed Accommodation Layout*

3.3 The accommodation will consist of an elite block with 100 bedrooms and a student block with 50 bedrooms.



- *Elite Block:* This is primarily for use by the senior international teams (men or women) and the Under 21's; as well as for the more senior coaching education courses. The rooms are more likely to be used as single rooms, although could be converted for use as twin bedded rooms.
- *Students Block:* This is primarily for use of the younger player teams; as well as younger coaching education courses. The rooms are likely to be used as twin bedded rooms.

3.4 Depending on the annual calendar rotation, the entire accommodation would be used with as much flexibility as possible. The Football Association acknowledges that the busiest time of the calendar is traditionally during educational holidays between Mid June – Mid August.

## 4. TRIP GENERATION

4.1 Trips to and from the site will be made by:

- Office Staff living off the site
- Permanent Staff who live on the site
- Future users of the site (i.e. players, coaches and support staff)

### *Office Staff Living Off Site*

4.2 The office staff living off site are likely to arrive daily by car, say 75 two way trips each day (1 car for each member of staff = 150 trips a day in total). Although the facility will be used 7 days a week, office staff will work a traditional week of Monday to Friday and no more than 10% of staff will work during the weekend. These trips are to be made in the peak hours, between 0800 – 0900 in the morning and 1700 – 1800 in the evening. These assumptions assume a ‘worst case’ scenario, as some staff may lift share, others arrive by public transport. Although there are no bus services to Byrkley Park, the Borough Council may support the extension of an existing service which currently terminates at Rough Hay.

### *Permanent Staff Accommodation*

4.3 Three dwellings for permanent staff are likely to generate a minimal number of trips, say 3 return trips per day per house (= 6 trips in total per dwelling, 18 trips in total). For the purposes of the assessments it has been assumed that these trips occur between 0900 and 1700. This calculates at an average of 2 movements an hour over the day.

### *Players, Coaches and Support Staff*

- 4.4 Players will arrive alone, together or by coach. Arrival and departure times will be determined by the timing of training sessions and are likely to follow one of two patterns:
- (i) Mid morning arrivals in time for lunch, with a training session in the afternoon. Departures in mid morning after breakfast and an early morning training session.
  - (ii) Mid afternoon arrivals in time for tea, followed by either a meeting or an evening training session. Departures in mid afternoon after a morning training session and lunch.
- 4.5 As a result of these training patterns, traffic movements are less likely to occur during the peak periods of 0800 – 0900 and 1700 – 1800. Instead, these trips are more likely to take place between 0900 – 1200 am and 1400 – 1700 on information received by the FA.
- 4.6 Trips to the facility itself would depend on the number of squads visiting the facility at any one time and their method of transport to the site (e.g. minibus, coach, or by car). In the case of the international team, it is likely that players, coaches and their staff will make their own way to the site.
- 4.7 The FA is currently investigating the potential for using the Tattenhill Flying Club airfield as an alternative means for visitors to access the site.
- 4.8 Other squads using the facility are more likely than the national squad to arrive together.
- 4.9 The timing of trips is important, but because all players and staff would be staying on site, there would be little coming or going during peak hours on the highway network. Instead, trips will tend to be made throughout the day on those days when players either arrive or depart the site at the beginning and end of their stay. Lengths of stay will tend to vary between 2 and 10 days.

### *Total Trip Generation*

- 4.11 The facility will provide 150 room accommodation, with all rooms able to offer twin bed spaces if these are required. However, courses and training sessions will start and