

Project Title: Sheepcote Valley, Brighton
Project No: JNY6087
Title: **Transport Assessment Summary**
Date: 7 February 2007

Context

1. RPS Transport has been commissioned by Lewes District Council (LDC) to prepare a Transport Assessment (TA) considering transport and accessibility issues associated with locating a new community stadium at Sheepcote Valley, Brighton. The stadium would have a seating capacity of up to 22,500 spectators and would become the new home of Brighton and Hove Albion football club (BHA). The Stadium would host up to 50 outdoor events each year which would predominantly be football matches with a maximum of 6 concerts.
2. Brighton is already a major international tourist attraction and during the Summer season can attract around 1,000,000 day visitors per month. During the Autumn and Winter seasons when the majority of football matches are held, tourist numbers decline significantly with typical numbers of around 400,000 day visitors per month.
3. This Briefing Note provides a summary of the key assumptions underpinning the assessment process and the outcomes of the assessments undertaken.

Site Location

4. The Sheepcote Valley site is situated in the east of the Brighton and Hove conurbation and is contiguous with and forms part of the built up area (BUA). To the north lies Brighton Racecourse and to the east, the predominantly residential areas of Woodingdean and Ovingdean.
5. To the south of the Sheepcote Valley is the Brighton Marina redevelopment area. This is a substantial new mixed use development which is focussed primarily on leisure and residential uses. Combined with the nearby Black Rock redevelopment area, the Sheepcote Valley area is becoming a vibrant new leisure quarter in the east of the City.

Transport Strategy and Proposals

6. The transport strategy underpinning the development of a Community Stadium at Sheepcote Valley takes a two pronged approach to catering for travel demand comprising:
 - **Managing** mode choice and demand in relation to travel to the Stadium through active intervention; and
 - **Investing** in new transport initiatives where shortfalls in provision are identified.

7. In this context, the Stadium development would be accompanied by a number of transport proposals which would include:
- 1,500 car parking spaces which equates to the PPG13 maximum parking ratio of one space per 15 visitors;
 - 440 cycle parking spaces;
 - 150 dedicated motorcycle parking spaces;
 - Provision of a 50 space coach park and transport interchange;
 - Five strategically positioned park and ride sites which could accommodate up to 5,400 visitors per hour;
 - Identification of central collection points / park and ride opportunities to the east of the Sheepcote Valley to better utilise existing bus services;
 - A Controlled Parking Zone within the vicinity of the site;
 - Event day enhancements to existing bus services;
 - Dedicated new bus services originating at appropriate residential locations; and
 - A comprehensive Mobility Management Strategy (MMS) which would discourage travel to the stadium by the private car and manage the movement of vehicles and people arriving at the Stadium.
8. Through careful management of event day travel, opportunities exist to reduce parking below 1,500 spaces as part of the wider MMS. This is usual for sports stadia located in urban areas and reflects the location of the Sheepcote Valley which is contiguous with the existing communities within Brighton and Hove. It would therefore be accessible to a large proportion of the expected fanbase by non-car means of travel and especially non-motorised means of travel.
9. This contrasts sharply with out of town locations such as Falmer Village where, by the very nature of the distances involved and, being located in the South Downs, the topography, it is unlikely that many visitors would choose to either walk or cycle to reach the site.

Brighton Rapid Transit System

10. A bid has been submitted to government to fund the proposed Brighton Rapid Transit System (BRTS). BRTS would be a conventional bus based system with priority provided wherever possible. The system is anticipated to complement existing public transport services serving Brighton Marina and the Sheepcote Valley, providing additional capacity rather than replacing conventional bus services. Subject to funding, the opening year of the BRTS is anticipated to be 2010/11 with a construction time of around twelve months required from confirmation of

funding. Match day enhancements to the level of service could be provided should the system come forward.

Background

11. The assessment presented in the report takes as a starting point and builds on work previously undertaken by Savell Bird and Axon (SBA) which was presented over the course of an Inquiry, the first part of the Inquiry ending in October 2003 and the re-opened Inquiry ending in May 2005. The purpose of the Inquiry, was to consider proposals to locate the Community Stadium outside of the BUA at Falmer Village, which lies in an Area of Outstanding Natural Beauty.

Changes in the Transport Environment

12. Since the Inquiry closed in 2005 a number of events have occurred which have served to alter the transport environment within the Brighton Urban Area (BUA). These comprise:
 - Advancement of the draft Regional Spatial Strategy for the South East. The effect of this is that:
 - Brighton has been identified in the South East Plan as a regional hub. This means that there will be an increasing focus on measures that increase the level of accessibility by public transport, walking and cycling in order to support higher densities and concentrations of development; and
 - Both the A27 and A23 corridors have been identified as regional spokes. This means that they will become a focus for future transport infrastructure investment at a national and regional level which will enhance existing levels of accessibility to the urban area.
 - Submission and adoption of the Brighton and Hove City Council Local Transport Plan 2 (BHLTP2) resulting in:
 - A greater emphasis by B&HCC in LTP2 on accessibility planning within the urban area. This embraces commitments through the LTP2 process to achieving a rebalance of the transport system in favour of non-car modes as a means of access to services and facilities. Essentially this amounts to a commitment to moving away from planning transport on the assumption that the car is the primary means of transport;
 - The encouragement of higher concentrations of development in order to achieve higher levels of accessibility. This could be achieved through new development such as the Community Stadium building on existing non-car travel opportunities and facilitating new measures and systems to the benefit of accessibility in the urban area as a whole;

- A greater emphasis on parking restraint through the implementation of Controlled Parking Zones (CPZ). A CPZ in the Sheepcote Valley area would discourage visitors from driving to the stadium as there would be nowhere to park and therefore encourage more visitors to utilise the range of non-car modes available (BHLTP2 para 6.16);
- A re-commitment to enforcing maximum parking standards in order to discourage non-essential use of the private car; and
- An expansion of the council's transport website complemented with the biggest personalised Travel Planning project in the UK.
- Submission and adoption of the East Sussex County Council Local Transport Plan 2 (ESLTP2) resulting in commitments to:
 - increase accessibility to services achieved through providing greater travel choices and land use decisions;
 - Rebalancing the preferred choice of transport towards non-car modes;
 - Promoting and improving facilities for walking, cycling and public transport, so that these modes are safe and attractive options;
 - Implementing demand management strategies, such as decriminalised parking enforcement with on-street parking charges; and
 - Improving transport and travel information, so people know about the travel choices available.
- Changes to available bus capacities within the Brighton Urban Area (BUA) identified through surveys resulting in an increased hourly public transport capacity serving Sheepcote Valley (compared to May 2005).
- Advancement of proposals for bus priority along the A259, which is identified as a sustainable transport corridor providing new opportunities to operate effective park and ride / collection points at sites to the east of Sheepcote Valley which could utilise scheduled bus services rather than requiring bespoke services. In the short term (twelve months) the bus priority measures would result in improved public transport accessibility from the east arising from the implementation of the proposed Rottingdean – Newhaven public transport priority scheme. This scheme would enable visitors travelling from the east and using public transport to access the stadium more quickly and efficiently.
- The submission of a major scheme bid for a Brighton Rapid Transit System (BRTS) which would serve the Sheepcote Valley area. Subject to funding, opening year of BRTS is anticipated to be 2010/11. The scheme is identified in Annex B of the Regional Funding Allocation Indicative list of schemes.

- Submission of a planning application and approval for the next phase of leisure, retail and residential development at Brighton Marina, which is located adjacent to Sheepcote Valley, and associated transport infrastructure improvements and the preparation and adoption of a Design Brief for the proposed 10,500 seat capacity Brighton Arena, which is located near to Sheepcote Valley, and associated transport infrastructure improvements. These two developments emphasise the emergence of the Sheepcote Valley as a new leisure and entertainment quarter through the clustering of a number of leisure, retail and entertainment venues associated with both the Brighton Marina and Brighton Arena developments. More importantly, these developments create similar accessibility requirements as the Community Stadium, and so synergies between accessibility measures could be achieved. In contrast, locating a stadium outside of the urban area remote from other major development such as at Falmer Village means that any additional transport capacity required to serve the stadium would be in effect provided solely for the use of the stadium itself without delivering any potential benefits to the wider community.

13. The assessment presented in this report demonstrates that these changes have, and will continue to, materially affect accessibility in relation to Sheepcote Valley since the Inquiry ended in May 2005. These changes suggest a move towards higher concentrations of development in the urban area where non-car accessibility can be better planned for and delivered, combined with an emphasis away from travelling by private car.
14. As a consequence of these changes, Table S1 below provides a summary of the current available transport capacity in relation to the Sheepcote Valley.

Table S1: Available Transport Capacity

Mode	Maximum available capacity (Visitors)
Walking	4725
Cycling	450
Park and Ride	7720
Bus / Supplementary bus	5276
Football specials	3392
Rapid Transit	960
Private Car	4500
Other (including taxi, motorcycle etc)	900
Total	27,923

Notes: Based on arrival pattern assuming a peak hour arrival rate of 70% of all visitors.

15. Table S1 demonstrates that if all the transport capacity available in relation to the Sheepcote Valley is utilised, then a total of 27,923 people could be moved to the new Community stadium. This is significantly higher than the 22,500 maximum capacity proposed for the stadium and could justify a reduction in parking provision at the stadium itself to ensure that more visitors travelled by sustainable means.
16. Importantly, it means that even if proposed schemes such as the Brighton RTS are not forthcoming, the Community Stadium would remain an accessible location for a capacity event.

Assessment of Development Effects

17. An assessment of the potential effects of the development on the surrounding local transport network has been undertaken and in particular the burden a capacity event might place on individual modes of travel. It is anticipated that a considerable number of fans would arrive in the BUA by rail. Some of these may go on to meet friends in the centre of Brighton and then walk the 25 minutes to the stadium along the sea front, some may choose to travel by bus / taxi to the stadium. However the accessibility assessment undertaken in the TA focuses on movements within the BUA. Therefore for the purposes of the TA, fans arriving to the BUA by rail are implicit to other modes such as walking.
18. The assessment takes as its starting point parking guidance set out in PPG13 which is aimed at reducing the number of private car trips made in relation to sports venues in order to ensure their sustainability in the long term. The application of maximum parking standards at the stadium would be complimented by the implementation of a CPZ in the surrounding area. This would serve to reduce the potential for nuisance parking in neighbouring, residential

areas and reinforce the Stadium's commitment to encouraging visitors to choose non-car modes to travel to the Sheepcote Valley.

19. Building on the analysis presented in Table S1, the forecast number of visitors travelling by each mode to a capacity event at the new community stadium and also for a typical event is presented in Table S2 below.

Table S2: Forecast Mode Split

Mode	Mode Split	Number of Visitors (22,500 capacity event)	Number of Visitors (15,000 average event)
Walking	21.0%	4,725	3,150
Cycling	2.0%	450	300
Park and Ride	21.0%	4,720	3,147
Bus / Supplementary bus	14.3%	3,226	2,151
Football specials	15.1%	3,392	2,261
Rapid Transit	2.6%	587	391
Private Car	20.0%	4,500	3,000
Other (including taxi, motorcycle etc)	4.0%	900	600
Total	100%	22,500	15,000

Notes: Based on arrival pattern assuming a peak hour arrival rate of 70% of all visitors.

20. Table S2 demonstrates that the total number of visitors expected to arrive at the stadium by non-car means would amount to 80%. Of these 53% are expected to arrive by public transport or park and ride.

21. In terms of vehicular impacts, an operational assessment has been undertaken to forecast the potential effects on the highway network of the remaining vehicular traffic, including the additional bus services / coaches. Detailed assessments have been undertaken for a typical Saturday afternoon peak hour for the following junctions which RPS understand are free-standing signal controlled junctions:

- Wilson Avenue / Roedean Road;
- Wilson Avenue / Warren Road;
- Warren Road / Falmer Road (Woodingdean); and
- Falmer Road / A259 (Rottingdean).

22. The results of this analysis indicate that these junctions would operate at or around saturation level during the busiest hour prior to a Weekend afternoon kick-off.

23. Notwithstanding this, for short periods of time during the busiest hour, demand is expected to exceed the capacity of the junctions. However, this situation would occur for only short periods and the junctions would return to operating within capacity after these short demand spikes had ended. This is a typical pattern for a sports stadium and it is unusual for new highway capacity to be provided to accommodate such spikes in traffic demand, which may occur on less than 50 occasions during the year. Event day management plans would be put in place to manage periods of peak highway demand and minimise the effects of these spikes. These may include temporarily closing roads for through traffic.

Paras 22 & 23 do not appear to quite tie in with the main report at 8.4.3. There you suggest no problems at all except for the one junction and that can be mitigated. Can you make these paras more positive?

24. Elsewhere within the BUA, signal junctions operate under a SCOOT system. This provides the flexibility to manage changes in traffic demand in real time as incidents occur such as through the gating of traffic or queue relocation techniques. Event day traffic management plans would therefore be developed which could be implemented through the SCOOT system to minimise the impact of stadium related traffic. In particular it should be noted that the timing of events would generally be outside of the conventional highway peaks minimising the potential impacts on the highway network.

Influence of Arrival Profiles

25. Whilst the proposed Community Stadium would be able to cater for up to 22,500 visitors, experience of such venues elsewhere shows that it is improbable that all these visitors would arrive in the hour prior to the event starting. Changes in the number of visitors likely to arrive in any given hour would have a significant effect on the burden placed on the transport network. A number of factors are involved in determining when people arrive in the stadium area and these can vary from event to event. Amongst others, these relate to whether spectators visit the stadium only or combine it with other leisure activities or social events in the proximity of the ground.

26. With this in mind, it is noted that Brighton is a major UK destination in itself and many trips to the new stadium are likely to be combined with visits to other attractions within the City: Palace pier for example, which forms the centre of the Brighton Sea front, is approximately 25 minutes walk from Sheepcote Valley along the sea front promenade. Furthermore, the Sheepcote Valley area is adjacent to Brighton Marina, which is an expanding leisure and entertainment quarter in the east of the City containing amongst other attractions, a number of bars and restaurants. It seems probable, therefore, that many visitors would combine a trip to the stadium with another purpose and that as a result, many visitors would make their way to the Sheepcote Valley area or nearby some time in advance of an event starting.

27. Recent surveys undertaken in relation to the new Emirates Stadium (Arsenal FC) suggest that 65% of visitors arrive in the stadium area a full hour in advance of the start of an event and that 30% of spectators visit a local pub / restaurant prior to an event starting.
28. It is therefore probable that that a significant proportion of visitors are likely to either arrive at the stadium or in the area quite some time prior to an event starting in order to take advantage of the facilities on offer in the immediate vicinity of the Community Stadium reducing the burden on the transport network. This would have the added benefit to the local economy of increasing footfall at these new and emerging developments during the quieter autumn and winter seasons.
29. This contrasts sharply with locating a stadium outside of urban areas such as at Falmer village where the lack of any other facilities, means that most visitors are likely to wait until the hour, or even half hour prior to the event starting to arrive in the stadium area thereby placing a significant burden on the available transport infrastructure.
30. For the purposes of assessing the transport impact of a Community stadium at Sheepcote Valley, the assessment therefore focuses on the predication of 70% of fans arriving either at the new community stadium or the Sheepcote Valley / Brighton marina area in the hour prior to the event starting. This means that the available transport capacity would need to cater for 15,750 visitors arriving in the Sheepcote Valley area within a single hour prior to an event starting.
31. Notwithstanding this, based on experience of sports stadia elsewhere in similar locations with a range of leisure and entertainment facilities in close proximity, this assumption is considered to be very conservative. In this context, it is expected that in reality, significantly higher proportions of visitors to the stadium would arrive in the Sheepcote Valley area or within east walking distance of the stadium more than one hour prior to an event starting.

Mobility Management Strategy

32. In order to fully maximise the travel opportunities available and to actively manage travel choice, an Mobility Management Strategy (MMS) would be prepared for the Stadium. The details of the MMS would be the subject of discussion and agreement between key stakeholders including B&HCC, East Sussex County Council, the Police, the Highways Agency, Lewes District Council and local residents. However as a minimum, the MMS would include:
- **Stadium Travel Plan** – which would detail the range of measures which would be employed to meet the mode split targets identified above;
 - An **Events Management Plan** – which would identify how individual events would be managed on the day and where identified as necessary, would include event day signal strategies; and

- **Parking Management Strategy** – which would set out how parking at the Stadium and Park and Ride sites would be allocated and managed; and
- **A Monitoring and Review Protocol** – which would be used to assess the effectiveness of individual travel plan initiatives and where necessary, identify opportunities to provide a more effective mix of travel plan measures.

33. The MMS would also set out a protocol for coordinating events between the Community Stadium, Brighton Marina and the proposed Brighton Arena. This would involve a commitment to coordinating major events hosted by the three leisure venues in such a way that accessibility synergies arising from shared transport infrastructure and facilities would be maximised.

Conclusion

34. In summary the provision of a new Community Stadium within the Sheepcote Valley would provide the opportunity to locate a new community facility within an established urban area which is well connected to existing centres of activity by a wide range of modes including walking, cycling, bus and Rapid Transit. Through focussed travel planning and careful event management, accessibility would be maximised enabling all visitors to access the Stadium by non-car means of travel.

Again, as per main report, can you say it would be in a sustainable location in accordance with govt policy etc.

35. Furthermore, the location of the Community Stadium adjacent to Brighton Marina and the emerging proposals for Brighton Arena would result in a clustering of entertainment and leisure venues with similar accessibility needs and requirements. This would lead to efficiencies in the provision of transport capacity and infrastructure, minimise duplication of transport resources and represent a best value approach to spatial and transport planning.

36. Under these circumstances, it is concluded that there are no transport or accessibility reasons for precluding development of a Community Stadium at Sheepcote Valley.