APPENDIX 5

TRANSPORT ASSESSMENT

PROPOSED RESIDENTIAL DEVELOPMENT ON LAND AT STATION ROAD WOMBWELL

REDKITE PROPERTY MANAGEMENT LTD

TRANSPORT ASSESSMENT

Bryan G Hall
Consulting Civil & Transportation
Planning Engineers
Suite E8
Joseph's Well
Hanover Walk
Leeds
LS3 1AB

February 2008

Ref: 07-399-001.2

V2

Transport Assessment prepared by .....
Michael W Jennings

Transport Assessment checked by .....

February 2008

Ref: 07-399-001.1

CONTENTS

1.0 INTRODUCTION AND BACKGROUND INFORMATION 1

2.0 RELEVANT TRANSPORT POLICIES 4

3.0 DESCRIPTION OF EXISTING CONDITIONS 6

4.0 USE OF THE LOCAL HIGHWAY NETWORK 8

5.0 CONSIDERATION OF SUSTAINABLE DEVELOPMENT POLICIES 9

6.0 IMPACT OF GENERATED TRAFFIC 10

7.0 SUMMARY AND CONCLUSIONS 12

1.0 INTRODUCTION AND BACKGROUND INFORMATION

1.1 This Transport Assessment has been prepared on behalf of Redkite Property Management Ltd and addresses the highways and transportation issues raised by the proposed residential development of approximately three hectares of land to the north-west of Station Road, Wombwell.

1.2 The Transport Assessment forms part of a planning application which is being submitted to the Local Planning Authority, Barnsley Metropolitan Borough Council. The planning application seeks outline permission for a mixed residential development of up to 150 units and provision of public open space.

1.3 The site is located within an industrial estate and is currently occupied by Windowstyle UK Ltd, manufacturers of double glazed windows and doors. The application site is separated into two distinct areas, A and B by Valley Road, the access road serving the industrial estate.

1.4 In 2007, Windowstyle UK Ltd manufactured some 330,000 window and door frames at the Station Road site, incorporating 750,000 double glazed units. The company currently employs some 460 people, of which 360 work on the main production processes which operate on a three shift basis, 24 hours a day, five days a week, Monday to Friday. The shifts currently operated are 6:00am-2:00pm, 2:00pm-10:00pm and 10:00pm-6:00am. In addition, some 100 managerial and administrative staff work traditional single shift office hours Monday to Friday, travelling to and from work in the traditional morning and evening peak periods.

1.5 The factory is located adjacent to existing residential properties on Station Road and the noise and disturbance associated with the 24 hour operation and shift changes at unsociable hours are a constant source of complaint from local residents. There is a significant shortage of onsite parking facilities and the arrival of car-borne employees and departure of the previous shift cause serious traffic congestion to occur on Valley Road and Station Road for a

period of up to one hour, three times a day, Monday to Friday, as shown on the photographs attached at Appendix BGH1.

1.6 Windowstyle UK Ltd are proposing to relocate their entire operation to larger, more modern premises in the Barnsley area. It is understood that an essential part of the financial arrangements for the relocation package involves obtaining planning consent for residential development on the Station Road site.

1.7 The proposed development involves demolition of the existing factory buildings located on Site A and the construction of up to 150 mixed residential properties, as shown on the indicative site layout plan attached at Appendix BGH2. The use of the remainder of the developed part of the factory site located to the east of Valley Road will be retained as industrial, with the likelihood that the existing buildings will be converted back into smaller units. The currently undeveloped part of the site (Site B) will be re-profiled to provide flood relief storage and re-designated public open space.

1.8 This Transport Assessment will demonstrate that the traffic likely to be generated by the proposed residential use of the site can be safely and satisfactorily accommodated at the existing Station Road/Valley Road junction, and that the local highway network will continue to operate in a safe and satisfactory manner.

1.9 This Transport Assessment will also confirm that the site can be satisfactorily served by modes of transport other than the private car. Existing bus stops are located on Station Road within convenient walking distance of all the proposed dwellings. Safe and convenient access to the site will be provided for pedestrians and cyclists via Valley Road and Station Road.

1.10 Following this introduction the remainder of the Assessment will be in Sections as follows:-

2.0 Relevant Transport Policies.

A summary of relevant national transport policies included in PPG13

3.0 Description of Existing Conditions.

A description of the local transport network.

4.0 Use of the Local Highway Network

The results of traffic surveys will be set out and the existing use of the local highway network analysed.

5.0 Development Proposals

Description of the development and the proposed access arrangements, having regard to advice set out in local and national design guidance.

6.0 Consideration of Sustainable Development Policies.

The high quality of existing public transport provision and measures to provide pedestrian and cycle linkages with the surrounding areas will be highlighted. It will be shown that the proposed development will further the aims and objectives of the Government's Sustainable Transport Policies in respect of both public transport usage and the opportunity to walk or cycle to local facilities, thereby reducing reliance on the private car.

7.0 Impact of Generated Traffic.

Calculations of the likely level of traffic generated by the proposed development and its distribution onto the local highway network. Analysis of the likely future operation of the existing junction of Station Road and Valley Road.

8.0 Summary and Conclusion

It will be concluded that the proposed development can be accessed in both a safe and efficient manner and that the traffic likely to be generated can be accommodated without resulting in demonstrable harm to highway interest. Additionally, the proposed development will further the aims and objectives of the Government's Sustainable Transport Policies, thereby reducing the reliance on the private car. It will be concluded therefore that there are no transport reasons why the development should not proceed.

2.0 RELEVANT TRANSPORT POLICIES

Planning Policy Guidance Note 13 - Transport

2.1 Planning Policy Guidance Note 13 – Transport, published in March 2001 provides advice on the integration of transport and land use planning. The objectives of the Guidance are to integrate planning and transport at national, regional, strategic and local level to:-

- promote more sustainable transport choices for both people and for moving freight;
- promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling, and
- reduce the need to travel, especially by car.

2.2 It is noted in PPG13 that mixed use development can provide very significant benefits in promoting walking as a primary mode of travel. Planning policies should therefore aim to encourage a mix of land uses, including housing in town, suburban and local centres.

2.3 In order to deliver the objectives of the Guidance when preparing development plans local authorities are advised in PPG13 to accommodate housing principally within existing urban areas, planning for increased intensity of development for both housing and other uses at locations which are highly accessible by public transport, walking and cycling.

2.4 Local planning authorities in assessing the suitability of sites for housing development should, amongst other things, consider their location and accessibility to jobs, shops and services by modes other than the car, and the potential for improving such accessibility.

2.5 In preparing their development plans and in determining planning applications, local authorities should pay particular attention to the design, location and access arrangements of new development to help promote walking as a prime means of access and ensure that the personal security concerns of

pedestrians are addressed. Local authorities should also influence the design, location and access arrangements of development to ensure it promotes cycling.

3.0 DESCRIPTION OF EXISTING CONDITIONS

3.1 The application site is located on the north-western side of Station Road, Wombwell, some 800 metres to the north-east of Wombwell town centre. The location of the site in relation to both the regional and local highway network is shown on the 1:50,000 scale Ordnance Survey extract attached at Appendix BGH3.

3.2 The site is located within 100 metres of bus stops on Station Road and within 1.5 kilometres of Wombwell Rail Station. Details of existing bus and train services are shown on the schedules attached at Appendix BGH4. The schedule shows that the site is served by a minimum of two buses per hour during the daytime in each direction along Station Road. Service 68/68A provides an hourly service between Barnsley, Darfield and Great Houghton; service 69 provides an hourly service between Barnsley and Darfield. There is also an infrequent service 66 from Wombwell to Thurnscoe. Some two trains per hour operate between Sheffield, Barnsley, Huddersfield and Leeds stopping at Wombwell.

3.3 The development site is divided into two distinct areas A and B, as shown on the scale Ordnance Survey plan attached at Appendix BGH5, both areas taking access from Valley Road, an industrial access road. Valley Road, a cul-de-sac, has a 9.0 metre wide carriageway, a 2.0 metre wide footway on its western side and a 1.8 metre wide footway on its eastern side separated from the kerbline by a 2.0 metre wide grass verge. The road is lit to main road standard, is subject to a 30mph speed limit and the centre of the carriageway is unmarked.

3.4 Some 120 metres to the south-east of the access to area A, Valley Road forms a simple priority junction with Station Road.

3.5 Station Road, B6096, is a distributor type of road which provides a link between Wombwell and Darfield. Station Road also provides direct access to

residential properties. It has a 7.3 metre wide carriageway and two 2.0 metre wide footways, is subject to a 30mph speed limit and is lit to main road standard. The centreline of Station Road is marked out with hazard warning lines on both approaches to its junction with Valley Road and the junction is marked out with give-way lines with priority given to traffic on Station Road. At a distance of some 4.5 metres back from the channel line of Station Road, visibility is available for drivers of vehicles emerging from Valley Road onto Station Road for a distance in excess of some 90 metres in both directions and this level of visibility is consistent with the advice given in Department for Transport Directive TD42/95, 'Geometric Design of Major/Minor Priority Junctions' for junctions on roads subject to a 30mph speed limit.

4.0 USE OF THE LOCAL HIGHWAY NETWORK

4.1 In order to assess the current usage of the existing highway network and to determine local trip rates and traffic distribution patterns, full classified traffic surveys were carried out on Tuesday 15 January 2008, during the morning and evening peak periods 7:30am to 9:30am and 4:00pm to 6:00pm at the junction of Station Road and Valley Road.

4.2 The surveys show that the peak hour flows on the local highway network occurred between 8:00am and 9:00am and 4:30pm and 5:30pm, as shown on the diagrams at Appendix BGH6. During the morning and evening peak hours Station Road carried a maximum two-way flow of some 712 and 820 vehicles respectively, whilst on Valley Road the corresponding flows were 196 and 166 vehicles per hour. It was noted during the surveys that no significant queuing occurred at the junction during the morning and evening peak hours.

4.3 The traffic surveys show that the existing highway network operates well within its practical capacity and is not congested at peak times. As noted at paragraph 1.5 however, severe traffic congestion occurs on Valley Road and Station Road in the periods before and after Window Style UK Ltd shift change times, namely 6:00am, 2:00pm and 10:00pm.

5.0 CONSIDERATION OF SUSTAINABLE DEVELOPMENT POLICIES

5.1 PPG13 places significant weight on the availability of bus services. As noted at paragraph 3.2, the site is located within 100 metres of bus stops on Station Road and within 1.5 kilometres of Wombwell Rail Station. The schedule attached at Appendix BGH4 shows that the site is served by a minimum of two buses per hour during the daytime in each direction along Station Road. Service 68/68A provides an hourly service between Barnsley, Darfield and Great Houghton; service 69 provides an hourly service between Barnsley and Darfield. There is also an infrequent service 66 from Wombwell to Thurnscoe. Some two trains per hour operate between Sheffield, Barnsley, Huddersfield and Leeds stopping at Wombwell. The site is therefore well located in terms of access by public transport.

5.2 In formulating the access arrangements, emphasis has been given to the provision of safe and convenient routes for pedestrians between the site and Station Road which will be achieved by the construction of a new segregated footpath link as shown on the indicative site layout plan.

5.3 It must be concluded therefore that the site is well served by modes of transport other than the private car and the location of the site is in accordance with the advice given in PPG13.

6.0 IMPACT OF GENERATED TRAFFIC

6.1 As noted at paragraph 1.7, the proposed development involves demolition of the existing factory and the construction of up to 150 mixed residential properties, as shown on the indicative site layout plan attached at Appendix BGH2. The use of the remainder of the developed part of the factory site located to the east of Valley Road will be retained as industrial, with the likelihood that the existing buildings will be converted back into smaller units. The currently undeveloped part of the eastern site (Site B) will be re-profiled to provide flood relief storage and re-designated public open space.

6.2 The assessment of traffic impact will take place in 2013 in accordance with Guidance on Transport Assessment published by Department for Transport, i.e. five years after registration of the planning application.

6.3 Using Central NRTF growth factors modified by TEMPRO the diagrams at Appendix BGH7 show the likely base flows, without development traffic, at the Station Road/Valley Road junction in the design year 2013.

6.4 An extract from the TRICS database showing average trip rates for mixed private housing is attached at Appendix BGH8 The average trip rates for the morning and evening peak hours are as shown in the table below:-

Peak Hour	Average Trip Rates per Household		
	Arrivals	Departures	Total
8:00am – 9:00am	0.101	0.364	0.465
4:30pm – 5:30pm	0.273	0.154	0.427

6.5 A development of 150 residential units would therefore be expected to generate an additional 15 arrivals and 55 departures in the morning peak hour and 41 arrivals and 23 departures in the evening peak hour.

6.6 The diagrams at Appendix BGH9 show the distribution and assignment of peak hour traffic based upon the pattern of existing traffic movements.

6.7 When the base design year traffic flows in Appendix BGH7 are added to the likely generated traffic flows shown in Appendix BGH9, the resultant predicted flows at 2013 are shown on the diagrams at Appendix BGH10.

6.8 The morning and evening peak hour performances of the existing Station Road/Valley Road junction at the design year 2013, including development traffic have been analysed using the PICADY computer program and the results are attached at Appendix BGH11. In the morning peak hour, the results show that the Valley Road approach is likely to operate with a maximum RFC of 0.219, an average delay of two seconds per vehicle with no significant queuing. In the evening peak hour, the corresponding values are 0.413, and three seconds and once again there is unlikely to be any significant queuing on the approach to the junction. It is concluded that the predicted increases in traffic will not result in a significant change to the existing operation of the junction which will continue to operate in a safe and satisfactory manner.

6.9 As noted previously, the existing industrial use of the site currently generates a considerable number of traffic movements. There is a significant shortage of onsite parking facilities and the arrival of car-borne employees and departure of the previous shift cause serious traffic congestion to occur on Valley Road and Station Road for a period of up to one hour, three times a day, Monday to Friday. The existing factory could operate on a single shift system without the need for planning permission therefore, potentially generating more traffic in the peak periods than the proposed development. The assessment of traffic impact has been carried out in the traditional peak periods, on the basis that there is no 'fall-back' position i.e. using either existing peak period traffic generation or potentially higher traffic generation if operations reverted back to a single shift system. It is therefore concluded that the traffic assessment has been carried out in a robust manner.

7.0 SUMMARY AND CONCLUSIONS

7.1 This Transport Assessment has been prepared on behalf of Redkite Property Management Ltd and addresses the highways and transportation issues raised by the proposed residential development of approximately three hectares of land to the north-west of Station Road, Wombwell.

7.2 The Transport Assessment forms part of a planning application which is being submitted to the Local Planning Authority, Barnsley Metropolitan Borough Council. The planning application seeks outline permission for a mixed residential development of up to some 150 units and provision of public open space.

7.3 The site is located within an industrial estate and is currently occupied by Windowstyle UK Ltd, manufacturers of double glazed windows and doors. The application site is separated into two distinct areas, A and B by Valley Road, the access road serving the industrial estate.

7.4 In 2007, Windowstyle UK Ltd manufactured some 330,000 window and door frames at the Station Road site, incorporating 750,000 double glazed units. The company currently employs some 460 people, of which 360 work on the main production processes which operate on a shift basis, 24 hours a day, five days a week, Monday to Friday. The shifts currently operated are 6:00am-2:00pm, 2:00pm-10:00pm and 10:00pm-6:00am. In addition, some 100 managerial and administrative staff work traditional single shift office hours Monday to Friday, travelling to and from work in the traditional morning and evening peak periods.

7.5 The factory is located adjacent to existing residential properties on Station Road and the noise and disturbance associated with the 24 hour operation and shift changes at unsociable hours are a constant source of complaint from local residents. There is a significant shortage of onsite parking facilities and the arrival of car-borne employees and departure of the previous shift cause

serious traffic congestion to occur on Valley Road and Station Road for a period of up to one hour, three times a day, Monday to Friday.

7.6 Windowstyle UK Ltd are proposing to relocate their entire operation to larger, more modern premises in the Barnsley area. It is understood that an essential part of the financial arrangements for the relocation package involves obtaining planning consent for residential development on the Station Road site.

7.7 The proposed development involves demolition of the existing factory buildings located on Site A and the construction of up to 150 mixed residential properties. The use of the remainder of the developed part of the factory site located to the east of Valley Road will be retained as industrial, with the likelihood that the existing buildings will be converted back into smaller units. The currently undeveloped part of the site (Site B) will be re-profiled to provide flood relief storage and re-designated public open space.

7.8 The traffic impact of the proposed development on the local highway network in the morning and evening peak hours has been assessed. The results of the assessment indicate that the development will have no material impact on the local highway network in the design year 2013. The results also show that the Station Road/Valley Road junction would operate well within capacity in the design year 2013.

7.9 The quality of existing public transport provision and pedestrian linkages with surrounding areas have been described and it is concluded that the proposed development will further the aims and objectives of the Government's sustainable transport policies in respect of both public transport usage and the opportunity to walk or cycle to the development, thereby reducing reliance on the private car.

7.10 It is concluded that the proposed development will have no significant effect on the operation of the local highway network and that highway issues do not

represent a material consideration in determining the current application.