

**PROPOSED RESIDENTIAL DEVELOPMENT ON LAND OFF SELSDON CLOSE, WYTHALL  
TECHNICAL NOTE: HIGHWAYS AND TRANSPORTATION  
FEBRUARY 2011  
REF: AB/20045**

### **Introduction**

This Technical Note has been prepared to provide a concise overview on work undertaken in relation to highways and transportation pertaining to a proposed residential development of 76 dwellings off Selsdon Close, Wythall. This note has been prepared to provide clarity on various transportation issues and to outline the work undertaken and the agreements reached with the Worcestershire County Council who are the Highway Authority for the local area.

### **Site Description**

The site is approximately 3ha in size and located on the eastern side of Wythall village off Lea Green Lane and Selsdon Close. The site is currently Greenfield with some agricultural buildings located towards the southern site boundary. The site is bound to the west and south by existing residential properties located on Lea Green Lane and Lea Green Drive, to the east by a railway line and to the north by existing agricultural land and existing properties on Selsdon Close. A watercourse is noted along the length of the northern boundary.

The site is currently accessed from the west of Lea Green Lane from a private track however it is considered the proposed residential development will be accessed off Selsdon Close to the north of the site through a continuation of the existing cul-de-sac. At present there is a hedgerow separating the site from Selsdon Close and therefore removal of the hedgerow will be required to enable the continuation of Selsdon Close into the site.

### **Consultations**

Pre-application discussions with the County Council commenced in May 2010 in order to scope out the requirements for any transportation documents prior to the commencement of work and submission of a planning application.

The Worcestershire County Council guidance on how to prepare a Transport Assessment is based on the Department for Transport (Dft) guidance 2007. A Transport Assessment is usually necessary when development proposals are greater than 80 dwellings and below this point a Transport Statement is usually sufficient. The main difference between the 2 types of document are that the Transport Assessment requires transport modelling to be undertaken to assess any impact on the strategic highway network. In this instance and based on the development only being 76 dwellings the production of a Transport Assessment document was not necessary. However in order to present a robust case and to seek to overcome concerns raised by local residents a Transport Assessment was still submitted as part of the planning application to ensure that all the necessary issues were

considered. In addition to this a Travel Plan document was also produced to consider sustainable transport opportunities in more detail and to outline how the site would seek to encourage the use of walking, cycling and public transport (bus and train).

A Transport Scoping note was agreed with Worcestershire County Council which sets out the requirements for the preparation of the documents and a summary is outlined below (note the Transport Assessment considers a development size of 80 dwellings):

- Review existing sustainable transport opportunities
  
- Consider traffic impact at the following junctions:
  - Station Road/Lea Green Lane T-junction
  - Selsdon Close/Lea Green Lane T-junction
  - Lea Green Lane/Houndsfield Lane/Hollywood Lane crossroads
  - Shawhurst Lane/Hollywood Lane/Truemans Heath Lane mini-roundabout
  - Alcester Road/Houndsfield Lane/Silver Street crossroads
  
- Review and analyse accident data for the local area
  
- Consider access proposals into the site
  
- Outline key mitigation measures to ensure the development does not have any adverse impact on the local highway network.

Consultations have continued with Worcestershire County Council following submission of the planning application to ensure each issue was sufficiently resolved.

### **Sustainability**

A review was undertaken into the availability of sustainable transport opportunities to consider whether walking, cycling, bus and rail access can be provided as a realistic alternative to car travel. Local facilities are available within short walking distances of the site and can be found on Station Road and will assist in reducing short distance car trips. It was noted that whilst there are no specific cycle facilities in the local area Wythall village centre and the Maypole area are easily accessible and can be considered for shopping, employment and social reasons.

Bus services are noted as being less frequent than the desirable however the proximity of local services to the site is good with access available through improvements facilitates by the development proposals.

It is noted that the County Council are reviewing service provision in the local area however the site is also well located to take advantage of Wythall Railway station which provides a connection to Birmingham and a number of other destinations. The proximity of the site to the railway station offers significant opportunity for modal shift away from car travel.

**Traffic Impact**

Junction assessments have been undertaken at the key locations as agreed with Worcestershire County Council. Trip generation has been determined using the existing trip generation from Selsdon Close and this was shown in the Transport Assessment to be much higher than industry standard tools usually used for calculating trip rates. The trip rates are therefore considered to very robust.

Residential developments are most intensive during the AM (08.00-09.00) and PM (17.00-18.00) peak periods and the following trips rates were calculated (based on 80 dwellings):

Land Use GFA	AM Peak Hour Weekday (08.00 – 09.00)		PM Peak Hour Weekday (17.00 – 18.00)	
	Arrivals	Departures	Arrivals	Departures
Residential (80 dwellings)	0.091 (7 trips)	1.091 (87 trips)	1 (80 trips)	0.182 (15 trips)

In accordance with the requirements of Worcestershire County Council and through increasing traffic flows in accordance with normal industry practices the assessments were undertaken at the date of opening of first dwelling and then 5 years after the date of application registration. Assessments have therefore been undertaken for the following scenarios;

- 2011 base year assessments (proposed 1<sup>st</sup> year of occupation)
- 2015 future base year assessment (planning application submitted in 2010 + 5 years)
- 2015 base year plus development flows

The assessments without the development discovered that only the Houndsfield Lane Crossroads would operate over capacity in 2011 and 2015, but only on the Silver Street arm in the PM peak hour. All other junctions continue to operate within capacity even with the addition of the development traffic.

Applying the development traffic onto the 2015 base traffic flows shows that on the Houndsfield Lane crossroad junction (the only junction operating over capacity) 1 additional car queuing is predicted with an additional traffic delay of 3 seconds. It was therefore agreed with Worcestershire County Council that the increases in queuing and delay at this junction are insignificant and represents a 0.74% increase over the 2015 base scenario. No works to this junction are therefore proposed.

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The junction of Selsdon Close will see an increase in traffic movements as this is the sole access to the site. However the junction is currently lightly trafficked with very few movements and in the year 2015 with the development traffic no cars are predicted to be queuing and a maximum delay to access Lea Green Lane of 11 seconds is noted.

### **Accidents**

An analysis of accidents in the Wythall area was undertaken for the period of June 2005 to June 2010. A total of 40 incidents were noted however not all were considered relevant to this site due to their remoteness and the likelihood that little or no traffic impact would occur. The key areas are outlined below:

- Lea Green Lane has 2 recorded incidents, one in 2005 and the other in 2007 both being due to drivers losing control of their vehicles on the bend north of the site.
- Station Road has 4 recorded incidents all are slight and not close to the junctions which would immediately be used by this development.
- Norton Lane has no recorded incidents.
- A greater numbers of incidents recorded at the Houndsfield Lane Crossroads with 8 being recorded since 2007 and 2 of which are defined as serious. However the increase in vehicular movements from the site is not considered to be significant and would not give rise to an increase in the number of incidents. It should be noted that no further accidents have been recorded since June 2010.

It was concluded and accepted by Worcestershire County Council that there is not an accident problem in the local area.

### **Access – Selsdon Close**

Access into the site will be taken from Selsdon Close through the extension of the existing cul-de-sac. The existing Selsdon Close is 5.5m wide with 2m wide footways and so the proposed access road into the site will retain the existing geometry. The existing highway boundary currently extends up to the site boundary and the site separated by an existing hedgerow. This will be removed to enable the continuation of Selsdon Close into the site. A watercourse is situated along the northern boundary and a short section of culvert will be required in order to provide the access road. A screen print of the proposed access design is shown below.



## **Mitigation**

Following discussions with Worcestershire County Council the following key mitigations measures are proposed. It should be noted that some of these measures vary from what was considered as part of the Transport Assessment following more detailed discussions with the County Council.

It is considered the proposed development is not a significant trip generator and does have potential to reduce car movements. Worcestershire County Council therefore consider the site is well placed to encourage modal shift to further reduce development impact and have consequently requested a contribution of £40,000.00 towards providing safe uncontrolled pedestrian points and footway improvements to connect the site better to the Wythall Station, the Station Road parade of shops, provide better cycle connection to Drakes Cross parade and the supermarket at the Maypole. The contribution will be secured as part of the Section 106 Agreement.

A pedestrian/cycle link will be provided along the existing field track from the site to Lea Green Lane. This route will provide benefit to the site and also for residents off the existing Selsdon Close and for movements going from north to south along Lea Green Lane. It is noted that the footway on Lea Green Lane narrows to the south of Selsdon Close and therefore the proposed development will provide an alternate route through its connections onto Selsdon Close and Lea Green Lane and the provision of a network of new footways within the development area.

It is recognised that Selsdon Close's carriageway surface is in poor condition which will be further impacted by the construction traffic which could have an adverse impact on the structural condition of the highway. Worcestershire County Council have indicated that it would be a requirement of any development that once significant construction had been completed that the road be resurfaced and any structural repairs identified made good. These improvements will be secured as part of a Planning Condition and will be implemented through a Section 278 Agreement. The cost to the developer will be in the region of £15,000.00.

A Travel Plan has been prepared and agreed with Worcestershire County Council (some minor alterations will form part of a Planning Condition). Each resident will be provided with a "welcome pack" which highlights the alternative transport choices that are available. A temporary pass for the public transport network to encourage use will also be provided on a temporary basis. An onsite travel plan co-ordinator will be provided to assist in encouraging sustainable travel patterns and this will be a sales representative whilst they are on site.

## **Summary**

The Transport Assessment prepared for the proposed development demonstrates that there will be no adverse impact on highway capacity as a result of the development traffic. Accident analysis of the

network indicates no problems at the key junctions for this site and this is agreed by Worcestershire County Council and specifically the expert staff who consider accident data.

The road width of Selsdon Close accords with Worcestershire County Council's adopted highway design guide and is suitable to accommodate the proposed development. Outside of the site area on the wider highway network road widths cannot be widened due to the constraints of the existing highway limits and road widening cannot be substantiated as no capacity or accident problems are noted.

It is accepted local bus services are variable and are currently under review by the County Council, the outcome of which cannot be foreseen, but there is an existing service and efforts are being made to encourage use. The site is very well located to access the local train station and will also be further enhanced through contributions secured as part of the Section 106.

Various mitigation measures are proposed and these are considered to be in proportion to the size and impact of the proposed development. All issues have been agreed with the local highway authority who have raised no objects to the proposed development.

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