

## Strategic Review of Transportation Assessments With Regard to Site Suitability for Local Plan Inclusion

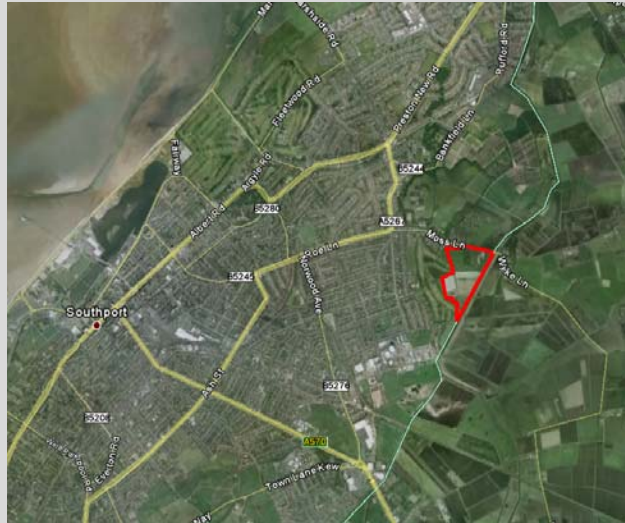
### Site SR4.3, Land at Moss Lane, Southport

#### Site Summary

Site SR4.03 is located on Moss Lane in Churchtown, approximately two miles east of Southport. It is on the edge of a residential urban area, separated by a golf course.

The site area is 19.67 hectares and can accommodate 538 homes.

A Transport and Highways Review, presenting a case against the development was submitted by Hydrock, which shall be referred to in this review.



#### Purpose of Strategic Review

This Strategic Review will determine whether the submitted transportation evidence for the above site is sufficiently robust to support the principle of development on the site.

Recommendations are presented below on the three strategic issues which are identified in paragraph 32 of the National Planning Policy Framework.

1. Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

The submitted transportation evidence from Hydrock has a number of shortcomings in its technical aspects:

- Non-robust trip distribution method
- Does not account for other local development plan sites.
- No junction modelling undertaken.

The Hydrock evidence uses 85<sup>th</sup> percentile trip rates, but also has issues with the trip distribution and does not undertake any modelling work.

A consequence of this is the need for SCP to rework the trip generation and distribution, and to consider the modelling of a number of junctions based on the distribution results (see Appendix 1 and Table 1 below for more information on trip generation and trip distribution).

Until the above is addressed, it is not possible to determine the severity of residual cumulative impacts of development, or identify the need and viability of improvements to the transport network.

It is of strategic importance to ensure that development does not have an adverse impact on traffic flow in Sefton that can not be mitigated, however, the Hydrock transportation evidence must adopt a more robust approach to support its argument against development.

**2. Safe and suitable access to the site can be achieved for all people**

Our own review of the site has found the site to be in a location with limited accessibility, which agrees with the broad findings in the Hydrock report. The following issues are particular concerns:

- The need for improved footways, street lighting and crossing points on Moss Lane
- Cycle and public transport accessibility.

Our own review has shown that there is very limited road space to undertake the desired improvements to the footway, and there are land ownership issues relating to the golf course that provide further obstruction. It will need to be proved by the developer that local facilities and employment can be reasonably accessed by non-car modes.

Safe and suitable access is highly strategic, in terms of safeguarding the well being for all road users, and for reducing car dependency, and therefore the above issues must be addressed.

**3. The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure**

Were the developer to demonstrate that points 1 and 2 above are achievable, the onus would be on them to develop and deliver sustainable transport modes.

Making the site more accessible for sustainable modes is of strategic importance because failure to do so would result in a car dependent development. Therefore we encourage continued engagement with regard to the development of sustainable improvements in the local area that may facilitate sustainable travel.

**Conclusions and Recommendations**

Due to the above described shortcomings in the technical work, the cumulative residual impact of the development remains unclear, and it is therefore not possible to judge whether the local road network can accommodate the development's traffic impact.

However, strategically, Hydrock's findings that the site is in a location that does not at present support safe sustainable access is valid, and there are land space restrictions that would create problems in terms of putting mitigation measures in place.

The onus is therefore on the developer to provide the necessary evidence to show that development on this site can be supported, and we encourage continued engagement from the Churchtown Greenbelt Action Group to ensure that adequate sustainable measures are implemented should this site be included in the Local Plan.

## Appendix 1

### Trip Generation

Trip Generation for each land use of the proposed development should be derived, with methodology and assumptions clearly stated.

Developers should look to provide a range of scenarios from a worst case to target trip rates. This is to account for the higher trip rates that tend to occur where a new build “edge of town” residential development has a high proportion of private housing.

As a guide, we have developed our own trip rates for edge of town residential developments.

Please refer to Table 1: Approach to Trip Generation and Scenario Management for Strategic Site Modelling for more details.

Residential Trip Rates per Dwelling	Mean Trip Rates		85 <sup>th</sup> Percentile Trip Rates	
	Inbound	Outbound	Inbound	Outbound
AM Peak	0.153	0.413	0.287	0.454
PM Peak	0.390	0.232	0.556	0.222

### Trip Distribution

Generated traffic should be distributed across the road network. Methodology and assumptions should be clearly stated, and traffic flow diagrams appended. Suggested best practice for trip distribution is included in Table 1: Approach to Trip Generation and Scenario Management for Strategic Site Modelling.

### Area of Assessment

Identify links and junctions to be assessed, with accompanying map and justification for any exclusions. As a guide this should include links and junctions which are affected by an increase in two-flow of more than 50 vehicles per hour.

### **Junction or Network Assessments**

The identified junctions and links should be assessed in line with Table 1: Approach to Trip Generation and Scenario Management for Strategic Site Modelling.

Flows should be presented as the total number of vehicles with percentage HGVs, or PCUs.

Appropriate industry-approved software should be used to model the network. Summaries should be provided of junction and link capacity (e.g. Ratio of Flow to Capacity or Degree of Saturation), queue lengths, and delay, to determine whether the traffic growth caused by the development will have a material impact on junction operation. Roundabout assessments should account for unequal lane usage where appropriate.

**Table 1: Approach to Trip Generation, Scoping and Scenario Management for Strategic Site Modelling**

	Trip Generation	Description	Outcome
Step 1 (identify trip rates)	<b>Target</b> - Lower Trip Rates	<p><b>Target level of Trip Generation through sustainable trip reduction</b></p> <p>Considerations include assessment of location, location of schools and jobs, demographic profile, surrounding infrastructure, cycle and walking facilities, and use of best practice documents on sustainable modes. Commit to Travel Plan Measures to achieve target trip rates.</p>	Assess the most appropriate Trip Generation Rate for the Strategic Site for use in the Transport Assessment. Provide Sefton Council with justification on trip rates employed through an evidenced based approach. If no justification is provided, then use Worst Case 85 <sup>th</sup> % Trip Rates from TRICS.
	<b>Most Likely</b> - Between "Target" and "Worst Case"	<p><b>Most Likely level of Trip Generation with some level of sustainable trip reduction</b></p> <p>Assess Location and development mix. Use the TRICS database or other evidence to justify appropriate Trip Rates.</p>	
	<b>Worst Case</b> - 85th % Trip Rates from TRICS (or HA 85th percentile Trip Rates)	<p><b>Worst Case level of Trip Generation with no sustainable trip reduction</b></p> <p>Based solely on assessment of location and development mix. Use the TRICS database to justify appropriate 85th percentile Trip Rates.</p>	
	<b>Scope of Network Assessment Coverage</b>	<b>Trip Distribution and derivation of 'In Scope' network</b>	
Step 2 (identify network coverage)	Gravity Model or SATURN Modelling	<p>Gravity Model showing origins and destinations of AM and PM Car Driver Trips to and from development. Trip distribution flow diagram(s) showing assignment of trips to network.</p> <p>or</p> <p>Employ use of the Transport Model where available following due diligence by the developer.</p>	
	Junction Assessment Criteria	<p>Threshold number of 50, two-way trips, on links and junctions from and to the development.</p> <p>Use of Appropriate Modelling Software</p>	

	Modelling Scenario Management	Description	Growth to be Applied
Step 3 (Modelled Scenarios)	1. <b>Base</b> Year 2013/2014	Base year demonstrating existing conditions	None
	2. Future Year <b>Reference Case</b>  Assumed to be full build out year (Intermediate year assessments to be considered for phasing of development)	Base + Committed Developments + Background Growth	<b>Committed Developments</b> - Use Existing TA's. <b>Background Growth</b> - For car driver growth use TEMPRO & NTM adjustment. Planning Assumptions should be adjusted to reflect total Local Plan Development & with assessed development removed. For LGV & HGV Growth use NTM. (All should be in line with webTAG Unit 3.15.2).
	3. Future Year <b>Reference Case + Development</b>  Assumed to be full build out year (Intermediate year assessments to be considered for phasing of development)	Base + Committed Developments + Background Growth + Development	<b>Committed Developments</b> - Use Existing TA's. <b>Background Growth</b> - For car driver growth use TEMPRO & NTM adjustment. Planning Assumptions should be adjusted to reflect total Local Plan Development & with assessed development removed. For LGV & HGV Growth use NTM. (All should be in line with webTAG Unit 3.15.2). <b>Development Traffic</b> - Use trips generated using agreed trip rates, and distribution using agreed gravity model distribution.

	Cumulative Impact Assessment of Adjacent Developments	Description	Growth to be applied
<p>Step 4 (Detailed Cumulative Impact Assessment)</p>	<p>Future Year <b>Reference Case</b> (with adjusted Background Growth) + <b>Adjacent Development + Development</b></p>	<p>Base + Adjacent Developments + Background Growth (adjusted for adjacent developments) + Development</p>	<p><b>Committed Developments</b> - Use Existing TA's.  <b>Background Growth</b> - For car driver growth use TEMPRO &amp; NTM adjustment. Planning Assumptions should be adjusted to reflect total Local Plan Development &amp; with assessed &amp; adjacent developments removed. For LGV &amp; HGV Growth use NTM. (All should be in line with webTAG Unit 3.15.2).  <b>Adjacent Local Plan Developments (not committed)</b> - Explicitly model trips from nearby Strategic Sites.  <b>Development Traffic</b> - Use trips generated using agreed trip rates, and distribution using agreed gravity model distribution.</p>