

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

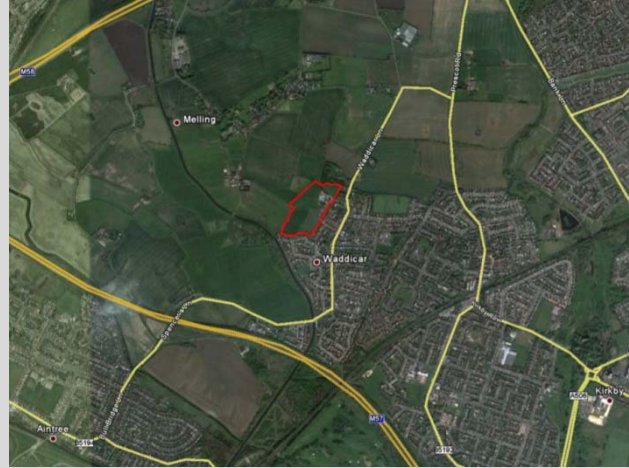
Site SR4.29, Land at Wadacre Farm, Waddicar

Site Summary

Site SR4.29 is located on Chapel Lane in Waddicar, approximately two kilometres north east of Kirkby. It is on the edge of a residential urban area.

The proposal is for 164 homes with a mix of affordable and market homes.

The accessibility review, providing the core transportation evidence was submitted by WYG Transport.



Purpose of Strategic Review

This Strategic Review will determine whether the submitted transportation evidence for the above site delivers suitably robust support for principle of development of the site and therefore justifies inclusion of the site in the Local Plan.

Recommendations are presented on strategic issues below that will need to be addressed for the site to stand up to scrutiny at Examination in Public. These recommendations are in line with the three key strategic issues identified in paragraph 32 of the National Planning Policy Framework, as per the headings below.

A more technical based overview of the suitability of the provided work is included in the Detailed Planning Response.

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 has a number of shortcomings in its technical aspects:

- Non-robust trip distribution method
- No inclusion of HGVs in junction models
- Does not account for other local development plan sites.

A consequence of this is the need to rework the trip generation and distribution, to reconsider the number of junctions modelled based on the distribution results, and to remodel junctions based on the revised trip generation and distribution rates.

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, and therefore this uncertainty must be addressed.

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

The submitted technical note is limited in terms of the information submitted for walking, cycling and public transport accessibility, as described in the Detailed Planning Response.

Nethertheless, our own review of the site has found the site to be in a fairly accessible location that can be further improved with achievable mitigation measures. The following work should be undertaken to demonstrate the strategic suitability of the site:

- A more thorough review of the accident data to ensure that increased traffic flows will not exacerbate any existing safety issues.
- Completion of a new accessibility assessment, which identifies suitable mitigation measures and considers access points for all non-car users.
- Undertake a further review of safe cycle accessibility.
- Review the need for a pedestrian crossing on Waddicar Lane

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

No opportunities for sustainable transport modes have been taken up. The following are suggested measures that would resolve existing issues with regard to the site location.:

- Pedestrian crossings on Waddicar Lane
- Segregated cycle facilities, depending on further review of cycle accessibility.

The taking up of the above opportunities to make the site more accessible for sustainable modes is of strategic importance because failure to do so would result in a car dependent development.

Conclusions and Recommendations

Strategically, the site is in a location that with an achievable level of mitigation can be made accessible to all modes of transport.

However 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.

Therefore the suitability of the site for inclusion in the Local Plan rests with the outcome of the revised technical work.

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 th 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)	Target - Lower Trip Rates	Target level of Trip Generation through sustainable trip reduction 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.	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 th % Trip Rates from TRICS.
	Most Likely - Between "Target" and "Worst Case"	Most Likely level of Trip Generation with some level of sustainable trip reduction Assess Location and development mix. Use the TRICS database or other evidence to justify appropriate Trip Rates.	
	Worst Case - 85th % Trip Rates from TRICS (or HA 85th percentile Trip Rates)	Worst Case level of Trip Generation with no sustainable trip reduction Based solely on assessment of location and development mix. Use the TRICS database to justify appropriate 85th percentile Trip Rates.	
	Scope of Network Assessment Coverage	Trip Distribution and derivation of 'In Scope' network	
Step 2 (identify network coverage)	Gravity Model or SATURN Modelling	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. or Employ use of the Transport Model where available following due diligence by the developer.	
	Junction Assessment Criteria	Threshold number of 50, two-way trips, on links and junctions from and to the development. Use of Appropriate Modelling Software	
	Modelling Scenario Management	Description	Growth to be Applied
Step 3	1. Base Year 2013/2014	Base year demonstrating existing conditions	None

(Modelled Scenarios)	<p>2. Future Year Reference Case</p> <p>Assumed to be full build out year (Intermediate year assessments to be considered for phasing of development)</p>	Base + Committed Developments + Background Growth	<p>Committed Developments - Use Existing TA's.</p> <p>Background Growth - 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).</p>
	<p>3. Future Year Reference Case + Development</p> <p>Assumed to be full build out year (Intermediate year assessments to be considered for phasing of development)</p>	Base + Committed Developments + Background Growth + Development	<p>Committed Developments - Use Existing TA's.</p> <p>Background Growth - 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).</p> <p>Development Traffic - Use trips generated using agreed trip rates, and distribution using agreed gravity model distribution.</p>
	Cumulative Impact Assessment of Adjacent Developments	Description	Growth to be applied
Step 4 (Detailed Cumulative Impact Assessment)	<p>Future Year Reference Case (with adjusted Background Growth) + Adjacent Development + Development</p>	Base + Adjacent Developments + Background Growth (adjusted for adjacent developments) + Development	<p>Committed Developments - Use Existing TA's.</p> <p>Background Growth - For car driver growth use TEMPRO & NTM adjustment. Planning Assumptions should be adjusted to reflect total Local Plan Development & with assessed & adjacent developments removed. For LGV & HGV Growth use NTM. (All should be in line with webTAG Unit 3.15.2).</p> <p>Adjacent Local Plan Developments (not committed) - Explicitly model trips from nearby Strategic Sites.</p> <p>Development Traffic - Use trips generated using agreed trip rates, and distribution using agreed gravity model distribution.</p>