



Independent Review

of

Planning Application No. PO/18/1857

relating to:

Outline planning application for the erection of up to 110 dwellings with 2 hectares of land for a new primary school, public open space, landscaping and sustainable drainage system (SuDS) and main vehicular access point from Beresford Road. All matters reserved except for means of access. Land off, Beresford Road, Holt, Norfolk

for

North Norfolk District Council

by:

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REPORT CONTROL

Project: Planning Application No. PO/18/1857

Client: North Norfolk District Council

Quality Checking

Primary Author: Steve Clarke Dip TP MRTPI **Date:** 16th December 2019

Review by: Malcolm Edwards (Director) **Date:** 16th December 2019

Executive Summary

This independent review, commissioned by North Norfolk District Council, has considered all the supporting information sent with the commission including representations from residents and Cllr Sarah Butikofer. It also considers the highway authority response which recommended approval subject to conditions and one planning obligation which relates to a contribution towards a local hopper bus service.

My starting point was the national and local planning policy framework which provides a basis for considering how development should be considered and related impact should be mitigated. I have also drawn upon advice in the Manual for Streets and the research that led to its production particularly in respect of the adequacy of Beresford Road.

The introduction to the Transport Assessment (TA) produced by Stirling Maynard (SM) advises that ‘..... ***The school does not form part of this application but is taken into account in this assessment for completeness.***’ I have a fundamental issue with respect to this contention for two reasons. Firstly, the primary school is part of the outline planning application and secondly the submitted Transport Assessment and Framework Travel Plan have not taken into account the primary school in sufficient detail to enable a full understanding of impact and mitigation to be considered.

The upshot of this independent review is that more work needs to be undertaken to demonstrate that the impacts of the development can be mitigated and development meets national and local planning policy requirements. This relates to the following:

- i. In respect of the junction capacity assessments, this would involve providing validation of the 2018 base junction capacity predictions relating to queues, delays and ratio of flow to capacity (RFC). This could be achieved by providing the evidence that the predictions are reliable. If this can be undertaken, I can confirm that I have no objections to the conclusion’s SM reach in their TA
- ii. No information has been submitted in respect of the type of traffic that might be associated with the primary school and whether the existing 5.5m wide

carriageway on Beresford Road would be sufficient to accommodate the vehicle demands.

- iii. A Parking and Travel Plan for the primary school should be submitted setting out the likely cumulative car parking demands off-site and how this would be managed. The submission and agreement of the Parking and Travel Plan is considered to be essential in advance of the planning committee being invited to consider the application to ensure that planning committee members can make an informed decision.
- iv. Depending on the scope and content of the Parking and Travel Plan for the primary school, consideration should be given to how its outcomes, measures, and remedies are best secured through the planning process (i.e. S106 or planning condition).
- v. Auto tracking is required for Beresford Road and Lodge Close to demonstrate that these can function as the primary and emergency accesses. This analysis should take into account the on-street parking likely to arise from the primary school.

I have considered the highway authority's recommended planning conditions and S106 obligation and agree with the inclusion of these in a planning consent subject to consideration being given to the matters raised above. Other conditions and S106 obligations may follow once consideration has been given to these matters. In addition, a planning consent should include a condition requiring a Construction Management Plan.

1.0 Introduction

1.1 My name is Steve Clarke (Dip TP MRTPI) and I am a Senior Transport Consultant at Edwards & Edwards Consultancy Ltd (EAE) where I am involved in a wide range of highway and transport related projects. During 2013-2017 I was the Chair of 6C's an East Midlands Regional Group tasked with developing excellence in respect of the delivery of Development Management services across the 3 Counties of Derbyshire, Leicestershire and Nottinghamshire including the four Cities of Derby, Leicester and Nottingham and Cheshire East. Its aim is to contribute towards the creation of sustainable and high-quality highways, transport and drainage infrastructure in partnership with other public authorities, developers and communities.

1.2 I have worked for many years in the public sector and at Staffordshire County Council I was Group Manager of Transport & Development Management for 15 years. For the past eight years I have worked in the private sector and as such I have extensive experience in town planning, transport planning, highway and traffic engineering.

1.3 EAE have been commissioned by North Norfolk District Council to review Norfolk County Council's (NCC's) response on Planning Application No. PO/18/1857 to provide an independent view on whether I agree with their response dated 20th May 2019.

2.0 Background and Purpose

2.1 The invitation to tender (see Appendix A1) provides the brief for the independent review of Planning Application No. PO/18/1857 from a highways perspective and Norfolk County Council's (NCC) highways response. In the interests of containing the review, the work undertaken has focussed on:

- a) The national and local policy context.
- b) The following information forwarded to Edwards and Edwards Consultancy by email dated 15th November 2019:
 - The Planning application form.

- Drawing Number 5664-L-02-K 'Development Framework' produced by FPCR Environment and Design Ltd, dated 17 April 2019.
- Drawing Number 5664-L-03-A 'Indicative Layout' produced by FPCR Environment and Design Ltd, dated 23 April 2019.
- Drawing Number 5664-L-04-A 'Location Plan' produced by FPCR Environment and Design Ltd, dated 11 April 2019.
- Drawing number 5664-L-05-B 'Indicative Layout Section – Public Open Space Adjacent Holt Country Park' produced by FPCR Environment and Design.
- Drawing number 5664-L-06-A 'Indicative Layout– Central Public Open Space' produced by FPCR Environment and Design Ltd, dated 18 March 2019.
- Drawing number 17033-12-01 'Proposed Access' produced by Stirling Maynard Construction Consultants dated Sept 2018.
- Drawing number 17033-12-02 'Proposed Emergency Access and Lockable Gate' produced by Stirling Maynard Construction Consultants dated Apr 2019.
- Framework Travel Plan produced by Stirling Maynard Transportation Consultants dated September 2018 (project ref FP028).
- HOLT - PO181857 - Outline planning application Development Committee report 10 Oct 2019 - Appendix A.
- HOLT - PO181857 - Outline planning application Development Committee report 10 Oct 2019.
- NCC Highways representation dated 18 Dec 2018.
- NCC Highways representation dated 20 May 2019.

- Planning Statement produced by Gladman dated September 2018.
- Transport Assessment produced by Stirling Maynard Transportation Consultants dated September 2018 - project ref FP028.

3.0 Methodology

3.1 The starting point for this independent review has been to consider the relevant national and local policies which inform decisions. Consideration will then be given to the planning application, the transport assessment and the framework travel plan which have been submitted in support of the application.

3.2 In undertaking this independent review I have been mindful of NCC's response to the application which comprises of a recommendation of approval subject to conditions and one planning obligation. I have also considered Councillor Sarah Butikofer's concerns who considers that a single point of access to the site is completely inadequate for the location and that traffic flow issues, on street parking congestion and dangerous driving are issues in the vicinity. I have considered all these issues including those made by residents who have expressed the following concerns:

- a. Increased traffic on Charles Road / Edinburgh Road.
- b. Access via Beresford Road is inadequate to serve the scale of the proposed development.
- c. Increased congestion associated with the school at drop off and pick up times.
- d. There are lots of parked cars on Hempstead Road, Charles Road & Beresford Road.
- e. Road safety issues in relation to the nearby Holt Community Hub (day centre) and the Children's Centre on Charles Road.
- f. Parents parking on Lodge Close, which is deemed to be inadequate.

4.0 The National and Local Plan Policy Context

4.1 This section considers adopted policies that are relevant insofar as the consideration of the proposed development in respect of highway and transport matters are concerned. This includes:

- National Planning Policy Framework (NPPF – February 2019).
- Norfolk County Council’s Local Transport Plan; and,
- North Norfolk Local Plan.

National Planning Policy Framework (NPPF) 2019

4.2 The revised NPPF was adopted in February 2019 and sets out the Government’s policies for England and how these would be expected to be applied. This revised framework replaces the previous NPPF published in March 2012.

4.3 The revised NPPF reaffirms the contention that at its heart “***....there is a presumption in favour of sustainable development***” and that “***Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety or the residual cumulative impacts on the road network would be severe.***”

4.4 The revised NPPF also alludes to:

- Seeking appropriate opportunities to promote sustainable transport modes.
- Providing a safe and suitable access to the site for all users.
- Ensuring that any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.
- Giving priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas.

- Facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.
- Creating places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles.
- Allowing for the efficient delivery of goods, and access by service and emergency vehicles.

4.5 The NPPF also requires that developments that generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

4.6 The NPPF also provides the following guidance on planning conditions and obligations

- Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition.
- Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects.
- Planning obligations must only be sought where they meet all of the following tests
 - a) necessary to make the development acceptable in planning terms;
 - b) directly related to the development; and
 - c) fairly and reasonably related in scale and kind to the development.

Local Plan Policies

- 4.7 A further key policy document which helps inform this independent highways and transport review is the Development Plan, which currently primarily comprises of the North Norfolk Core Strategy (September 2008). This document provides a detailed framework for the control of development and use of land that guides most day-to-day planning decisions in North Norfolk. The following policies from the core strategy 2012 which was adopted in September 2008 are relevant:

Policy SS6:Access and Infrastructure

New development should be supported by, and have good access to, infrastructure.....

Permission for development will not be granted unless there is sufficient capacity in existing local infrastructure.....

The transport strategy for North Norfolk is to maximise the use of non-car modes, within the context of a rural area where, for many trips, there are limited alternatives to the car. This will be achieved through promotion of walking and cycling for local trips, particularly within towns and villages, through traffic management schemes and parking regimes to reduce the impact of traffic on the rural and urban environment....

Policy EN4:Design

All development will be designed to a high quality.....

Ensure that places and buildings are accessible to all ,including elderly and disabled people; Incorporate footpaths, green links and networks to the surrounding area; Ensure that any car parking is discreet and accessible....;

PolicyCT2 Developer Contributions

On schemes of 10 or more dwellings and substantial commercial development where there is not sufficient capacity in infrastructure improvements

which are necessary to make that development acceptable will be secured by planning conditions or obligations

Policy CT5: The Transport Impact of New Development

Development will be designed to reduce the need to travel and to maximise the use of sustainable forms of transport appropriate to its particular location.

Development proposals will be considered against the following criteria:

- the proposal provides for safe and convenient access on foot, cycle, public and private transport addressing the needs of all, including those with a disability;*
- the proposal is capable of being served by safe access to the highway network without detriment to the amenity or character of the locality;*
- outside designated settlement boundaries the proposal does not involve direct access on to a Principal Route, unless the type of development requires a Principal Route location.*
- The expected nature and volume of traffic generated by the proposal could be accommodated by the existing road network without detriment to highway safety; and*
- If the proposal would have significant transport implications, it is accompanied by a transport assessment, the coverage and detail of which reflects the scale of development and the extent of the transport implications, and also, for non-residential schemes, a travel plan.*

PolicyCT6: Parking Provision

Adequate vehicle parking facilities will be provided by the developer to serve the needs of the proposed development. Development proposals should make provision for vehicle and cycle parking in accordance with the Council's parking standards, including provision for parking for people with disabilities. In exceptional circumstances, the application of these standards may be varied in order to reflect the accessibility of the site by non-car modes, or if

reduced provision would enhance the character of Conservation Areas in town or village centres. In such cases commuted payments may be required.

Extract from Core Strategy

Table 7 Car Parking Standards

Use Class	Car parking requirements (gross floor area unless stated otherwise)	Cycle parking requirements
Class C3: Dwelling Houses		
Use as a Dwelling House (whether or not as a sole or main residence)	<p>Average of 1.5 spaces / 1 bedroom unit</p> <p>2 spaces / unit for 2 or 3 bedroom unit</p> <p>min 3 spaces and max 4 spaces / unit for 4 or more bedroom unit (depending if double garage)</p> <p>In designated town centres the standard may be reduced if justified by improved accessibility and/or to enhance a Conservation Area. In these cases, an average of 2 spaces / unit or less will be provided over the development site.</p>	<p>None for individual houses with garages or rear gardens for a garden shed.</p> <p>For flats and developments with communal parking:</p> <p>Residents: 1 space / unit</p> <p>Visitors: 1 space / 4 units</p>
Class D1: Non-residential Institutions		
Education (Primary and Secondary Schools)	1 space / 1 FTE staff plus provision for school transport	<p>Children: 1 space / 6 children (secondary only)</p> <p>Staff: 1 space / 5 FTE staff</p>

4.8 This independent review will consider whether NCC's consideration of the planning application has taken the spirit of the NPPF including the above local plan policies into account.

5.0 The Planning Application Submission

5.1 Gladman Developments Ltd submitted an Outline Planning Application for the erection of up to 110 dwellings with 2ha of land for a new primary school,

public open space, landscaping and sustainable drainage system (SuDS) and main vehicular access point from Beresford Road. All matters are reserved except for means of access

- 5.2 The introduction to the Transport Assessment (TA) produced by Stirling Maynard (SM) advises that ‘..... ***The school does not form part of this application but is taken into account in this assessment for completeness.***’ I have a fundamental issue with respect to this contention for two reasons. Firstly, the primary school is part of the outline planning application and secondly the submitted Transport Assessment and Framework Travel Plan has not taken into account the primary school in sufficient detail to enable a full understanding of impact and mitigation to be considered. This compromises the planning committee members ability to fully understand the impact and ability to make an informed decision.
- 5.3 The proposed access is off an existing residential road known as Beresford Road which is 5.5m in width (flanked by 2.0m footways). The standard of design is proposed to be continued through to the development site albeit with possible localised widening on bends within the new estate (to accommodate school buses / service vehicles). NCC have advised that the detail of this will be determined as part of vehicle tracking exercise involved with any reserved matters application. An emergency access is also proposed off Lodge Close which has been agreed in principle by NCC but have yet to agree the detailed design of the emergency access.
- 5.4 To support the planning application a Transport Assessment and Framework Travel Plan have been submitted along with details of the proposed vehicle access, the emergency access including indicative plans of how the site could potentially be laid out. Although I shall not consider the indicative plans in detail I will provide comments on the principles underlying the proposed access and indicative internal layout.
- 5.5 All these matters will now be considered in the following sections.

6.0 The Transport Assessment (TA) and Framework Travel Plan (FTP)

6.1 In considering whether the TA produced by Stirling Maynard (SM) is a fair and accurate assessment with sound conclusions I have considered the following issues:

- a. The adequacy of Beresford Close as the primary means of access and Lodge Close as an emergency access to serve the proposed development.
- b. The contentions made about congestion on local roads.
- c. The concerns expressed about existing parking problems and likely increased on-street parking arising from the proposed development
- d. The methodology employed in the TA in respect of:
 - Committed development.
 - Proposed traffic generation.
 - Proposed traffic distribution and assignment to the network.
 - Junction capacity.
 - Recorded accidents
- e. The measures and outcomes in the proposed Framework Travel Plan

SM's TA Methodology

6.2 **Traffic Generation:** The TA has recommended residential trip rates and primary school trip rates that I would suggest are different than if a more selective interrogation of the TRICS database had been undertaken to better represent conditions at the site.

6.3 I have undertaken a more refined search of sites within the TRICS database (see Appendix A2) which has produced slightly higher trip rates and resultant traffic generations. This search has placed more emphasis on settlements with a lower population. Table A below shows the difference.

- 6.4 The TA makes an allowance between pupils generated from the proposed housing development and the pupils generated from outside the development. The assumption used seem reasonable. The arrival and departure trips have been factored accordingly resulting in a more accurate estimate of primary school trips impacting on the external highway network.
- 6.5 The TA also proposes to reduce the residential arrival and departure trips on the network on the assumption that there will be pupils from the housing development that will be driven to school. I do not accept this. Parents living in such close proximity to the primary school are more likely to walk to and from the school so I would suggest that the traffic generations referred to in Table A should remain the same. I have therefore produced Table B to show the additional traffic impacting on the external highway network.

Table A: TRICS Trip Rates and Traffic Generations of the Proposed Development

	AM (800:0900)			PM (1700:18:00)			Daily		
	Arrival	Departure	Total	Arrival	Departure	Total	Arrival	Departure	Total
Stirling Maynard's Trip Rate/Dwelling	0.137	0.359	0.496	0.321	0.141	0.462	2.244	2.235	4.479
Stirling Maynard's Traffic Generation	15	39	54	35	15	50	247	246	493
More Selective Trip/Rate/Dwelling	0.205	0.392	0.597	0.354	0.282	0.636	2.526	2.499	5.025
More Selective Traffic Generation	23	43	66	39	31	70	278	275	553
Net Difference Not Allowed for in TA	+8	+4	+12	+4	+16	+20	+31	+29	+60
Stirling Maynard's Trip Rate/Pupil	0.318	0.243	0.561	0.024	0.037	0.061	0.836	0.845	1.681
Stirling Maynard's Traffic Generation	134	102	236	10	16	26	351	355	706
More Selective Trip Rate/Pupil	0.305	0.214	0.519	0.062	0.061	0.123	0.854	0.844	1.698
More Selective Traffic Generation	128	90	218	26	26	52	359	354	713
Net Difference Not Allowed for in TA	-6	-12	-18	+16	+10	+26	+8	-1	+7
Total Net Difference Between Stirling Maynard's and the more Selective Interrogation of TRICS	+2	-8	-6	+20	+26	+46	+39	+28	+67

Table B: TRICS Trip Rates and Traffic Generations of the Proposed Development on the External Network During the AM and PM Peaks

	AM (800:0900)			PM (1700:18:00)			Daily		
	Arrival	Departure	Total	Arrival	Departure	Total	Arrival	Departure	Total
Stirling Maynard's Trip Rate/Dwelling	0.137	0.359	0.496	0.321	0.141	0.462	2.244	2.235	4.479
Stirling Maynard's Traffic Generation	15	39	54	35	15	50	247	246	493
More Selective Trip/Rate/Dwelling	0.205	0.392	0.597	0.354	0.282	0.636	2.526	2.499	5.025
More Selective Traffic Generation	23	43	66	39	31	70	278	275	553
Net Difference Not Allowed for in TA	+8	+4	+12	+4	+16	+20	+31	+29	+60
Stirling Maynard's Trip Rate/Pupil	0.318	0.243	0.561	0.024	0.037	0.061	0.836	0.845	1.681
Stirling Maynard's Traffic Generation (388 Pupils)	123	94	217	9	14	24	324	328	652
More Selective Trip Rate/Pupil	0.305	0.214	0.519	0.062	0.061	0.123	0.854	0.844	1.698
More Selective Traffic Generation	118	83	201	24	24	48	331	327	659
Net Difference Not Allowed for in TA	-5	-11	-16	+17	+10	+24	+7	-1	+7
Total Net Difference Between Stirling Maynard's and the more Selective Interrogation of TRICS	+3	-7	-4	+21	+24	+44	+38	+28	+67

Junction Capacity Assessments

6.6 The key junctions that have been assessed using the standard TRL software programs are:

- i) B1149 Norwich Road / Edinburgh Road priority junction.
- ii) B1149 / A148 roundabout.
- iii) A148 / Hempstead Road priority junction.
- iv) Hempstead Road / Charles Road

6.7 With the exception of the way traffic generations have been derived, as explained above, I have no disagreements with the assumptions made in respect of:

- i. Establishment of base flows which were derived by traffic counts;
- ii. The assessment year of 2023;
- iii. The addition of committed development traffic;
- iv. Traffic growth applied from the base year to the 2023 assessment year and
- v. Traffic distribution and assignment to the network.

6.8 The TA compares the way junctions perform in terms of junction capacity under the following scenarios:

- i. 2018 Base;
- ii. 2023 Base;
- iii. 2023 Base + Committed; and
- iv. 2023 Base + Committed + Proposed Development.

6.9 Whilst the above approach is acceptable, in principle, I would have expected validation of the 2018 junction capacity predictions (i.e. queues and delays) to ensure that the base assessment is an acceptable foundation upon which to

base the other scenarios. This is generally undertaken by providing queue and delay surveys. Unless this is undertaken the future year predictions can be misleading and unreliable.

- 6.10 For the purpose of this desk-based study I have not been able to check the geometry input into the PICADY and ARCADY modelling programs as no detailed plans of the junctions were provided with the brief.
- 6.11 The PICADY and ARCADY junction capacity analysis undertaken by SM demonstrates that the theoretical junction capacity predictions in terms of ratio of flow to capacity (RFC), vehicle delays and queues are within acceptable limits. Notwithstanding this, I would reserve judgement on this until it can be demonstrated that the 2018 base junction capacity assessments are representative of actual conditions.
- 6.12 If it can be demonstrated that the 2018 base assessment does represent actual conditions then the analysis undertaken demonstrates that the proposed development would result in acceptable conditions at the junctions assessed. I am also of the opinion that the traffic generation flows I refer to in Table B above would not result in a material difference in terms of predicted queues, delays and RFC's.

Framework Travel Plan (FTP)

- 6.13 Although this is an outline planning application the submitted Framework Travel Plan only relates to the residential component of the proposed development. This is surprising as the traffic generation from the primary school will generate more traffic than the residential development during the AM peak period and over the 24 hour-period. Also, given the car parking space allocated for the primary school, as shown on the indicative plan, it is likely that the primary school will result in a car parking demand on streets. On this basis, I cannot understand the reason why a Parking and Travel Plan has not been submitted with the Outline application to demonstrate how traffic and indeed the car parking demand arising from the primary school will be managed.

- 6.14 Neither the TA or FTP has considered what vehicles might be associated with the primary school. For example, I presume school buses and other service vehicles would be involved. If so, details of size and frequency would be helpful.
- 6.15 The Planning Statement submitted with the planning application advises that auto track analysis will be submitted to inform the road design serving the proposed development. I would recommend that auto tracking on Beresford Road and Lodge Close would also be helpful to demonstrate that these would function as the primary and emergency accesses before outline planning consent is granted. This analysis should take into account the likely on-street parking demand arising from the primary school.
- 6.16 There has been no assessment of likely cumulative parking demand arising from the primary school during the schools AM and PM peak periods to consider how this would impact on surrounding streets.
- 6.17 I would have reservations granting outline planning consent in the absence of a Parking and Travel Plan that has been submitted and agreed for the primary school which:
- i. Considers the cumulative car parking demand arising from the primary school during the AM and PM school peak periods.
 - ii. Includes indicative measures and outcomes on how vehicle traffic and car parking demand will be managed.
 - iii. Includes a methodology for monitoring the performance of the effectiveness of measures and outcomes for a minimum period of 10 years.
 - iv. Includes a commitment to remedies where the Parking and Travel Plan is deemed to be failing.
 - v. Includes a commitment to liaise with the County Council highway authority on the Travel Plan who should be made responsible for considering annual monitoring performance reports and agreeing the

remedies required to resolve problems as they arise in accordance with commitments set out in the Parking and Travel Plan.

- 6.18 Consideration also needs to be given to how such a Parking and Travel Plan is secured through the planning process. In my opinion, it might be better to secure it through a S106 obligation as this provides more scope than a planning condition.

Adequacy of Beresford Close and Lodge Close

- 6.19 Ideally an inter-connected street pattern would be better than the proposed culs-de-sac arrangement as this would enable better circulation of traffic. The only option to achieve this would be via Lodge Close but this is only proposed as an emergency access.
- 6.20 Beresford Road is 5.5metres wide and flanked with 2m wide footways either side. As alluded to above, auto track analysis should be undertaken to assess how bus and other service vehicles associated with the primary school would negotiate the 5.5m wide carriageway. Some sensitivity testing should be included in the assessment to take account of the likely on-street parking arising from the primary school.
- 6.21 Section 7.1 from the Manual for Streets provides advice about road widths. See Table C below.

TABLE C: Extract from Manual for Streets

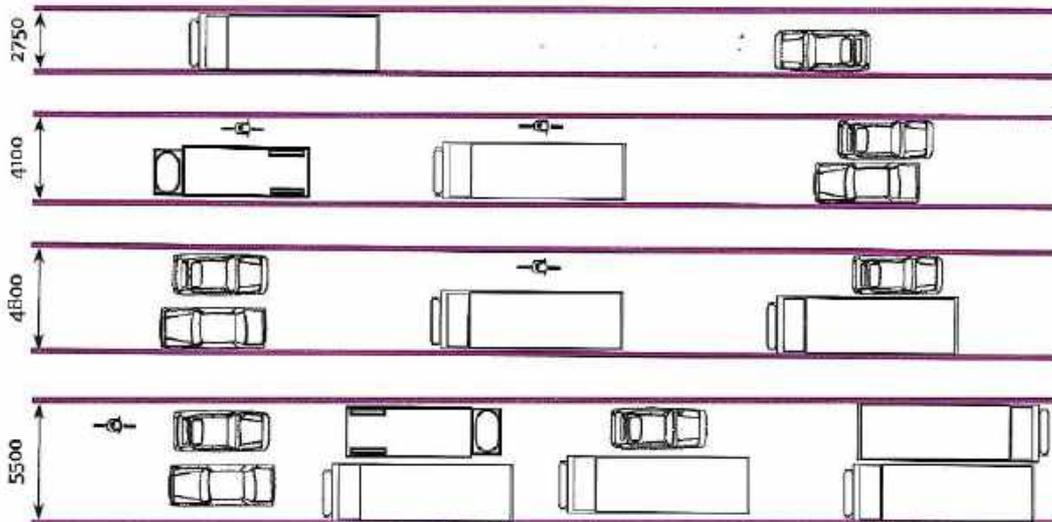


Figure 7.1 Illustrates what various carriageway widths can accommodate. They are not necessarily recommendations.

6.22 Section 7.1 from the Manual for Streets advises that roads widths should be informed by the particular context and use of the street which should include:

- i. Volume of vehicular traffic and pedestrian activity.
- ii. The composition of traffic.
- iii. The presence of on-street parking.
- iv. The design speed which in a residential area should be 20mph.
- v. The curvature of the street.

6.23 Beresford Road appears to currently serve approximately 35 dwellings so the proposed 110 additional dwellings including primary school will undoubtedly increase traffic volume. See Table D below which provides an indication of the way traffic would change.

Table D: Traffic Volume Taken from Tables A and B Existing and Proposed

	AM	PM	24 Hr Period
Existing (Assuming 35 Dwellings)	21	22	176
Proposed 110 Dwellings	66	70	553
Primary School	201	48	659
TOTAL EXISTING + PROPOSED	288	140	1388

- 6.24 The relationship between traffic flow and road safety for streets with direct frontage access was researched to inform the Manual for Streets. The upshot from this research was that very few accidents occurred involving vehicles turning into or out of driveways even on the survey sites which averaged 4,000 vehicles per day.
- 6.25 In the context of the research and table C above I am inclined to the view that the existing carriageway width of 5.5m of Beresford Road would suffice in respect of traffic volume but more information is required in respect of the matters alluded to earlier i.e.
- i. The cumulative on-street parking demand during the AM and PM school peak periods and how impacts can be managed through a Parking and Travel Plan;
 - ii. The method of securing the Parking and Travel Plan outcomes and remedies; and
 - iii. Auto tracking for Beresford Road and Lodge Close.

On-Street Parking

- 6.26 Increased on-street parking demand is likely to arise from the primary school component of the proposed development. The extent to which this might

happen in the case of the proposed development is not clear as no consideration has been given, in detail, to how parking associated with the primary school will be managed. In my opinion, consideration of the outline application by planning committee is premature until this work has been submitted as members would be invited to make a judgment without the full facts.

- 6.27 The Framework Travel Plan submitted with the application, albeit for the residential component only, is acceptable in principle but as advised earlier there is a need for a Parking and Travel Plan for the primary school.

7.0 Other General Issues

- 7.1 Given the location of the proposed development I would expect there to be a planning condition on any planning consent granted requiring a Construction Management Plan.
- 7.2 The internal layout should be informed by the Parking and Travel Plan associated with the proposed primary school.

8.0 Highway Authority's Response

- 8.1 I note the HA's views in respect of the primary means of access via Beresford Road. Whilst I am inclined to agree that Beresford Road would be an acceptable primary means of access in traffic volume terms, I would recommend further work prior to planning consent being granted to demonstrate that Beresford Road can accommodate the parking and service access demands arising from the primary school. This will include an assessment of cumulative car parking demand and agreement of the measures, outcomes and remedies to be included in a Parking and Travel Plan. This information is required before providing a definitive view that a 5.5m wide road would be an acceptable means of access to both the housing and primary school developments.
- 8.2 Auto track analysis would also be required for Lodge Close to demonstrate that this would be an acceptable emergency access.

- 8.3 As advised above, a more comprehensive construction management plan condition should be imposed to safeguard the environmental and safety interests of local residents.
- 8.4 I note the suggested travel plan conditions recommended by the HA but its not clear whether these conditions relate to the housing development only. For reasons explained earlier, I consider the impact of parking during school drop-off and pick-up times needs to be properly understood so that appropriate and mitigation measures, outcomes and remedies to be included in a Parking and travel Plan can be secured through the planning process.

9.0 Summary

Junction Assessments

- 9.1 In terms of junction analysis, I am the opinion that providing the micro-modelling 2018 predicted traffic conditions can be validated the additional traffic arising from the proposed development would be within acceptable limits.

On-Street Parking

- 9.2 Increased on-street parking demand is likely to arise from the primary school component of the proposed development. The extent to which this might happen in the case of the proposed development is not clear as no consideration has been given, in detail, to how parking associated with the primary school will be managed through a Parking and Travel Plan. In my opinion, consideration of the outline application by the planning committee would be premature until this work has been submitted. See earlier advice about the scope of the Parking and Travel Plan including how it should be secured through the planning process.
- 9.3 Auto track analysis is required for both Beresford Road and Lodge Close before any planning consent is granted to demonstrate that they can accommodate the vehicle demands that would be placed upon these roads.
- 9.4 In my opinion, consideration should be given to whether the Parking and Travel Plan for the primary school is secured through a S106 Agreement as this approach provides more scope to remedy problems that might be identified once the school is in operation. This will depend on the scope of the Parking and Travel Plan, the measures, the outcomes and remedies that might need to be called upon to resolve any issues.
- 9.5 If the S106 route is not a viable option at this stage in the planning application process an alternative approach, although in my opinion less satisfactory, would be to impose the following condition on any planning consent granted:

No part of the development which includes both the housing and primary school, shall commence until a Parking and Travel Plan for the

primary school has been submitted to and approved in writing by the North Norfolk District Council as local planning authority and shall be carried out in accordance with a timetable to be included in the Parking and Travel Plan, unless otherwise agreed in writing by the Council. The Parking and Travel Plan shall: (a) assess the site in terms of transport choice for primary school staff, users of services, visitors and deliveries; (b) consider pre-trip mode choice and measures to promote more sustainable modes of transport such as walking, cycling, car share and public transport (including providing a personal journey planner, information for bus routes, bus discounts available, cycling routes, cycle discounts available and retailers, health benefits of walking, car sharing information, information on sustainable journey plans, notice boards) over choosing to drive to and from the site, so that all users have awareness of sustainable travel options; (c) identify marketing, promotion and reward schemes to promote sustainable travel; (d) include provision for monitoring travel modes (including travel surveys) of all users and patterns at regular intervals the dates of which should be identified in the Parking and Travel Plan, for a minimum of 10 years from the date the primary school is brought into use. (e) include a commitment to produce an Annual Performance Plan setting out how the plan has performed against targets, the measures in the approved Parking and Travel Plan and the outcomes from the monitoring referred to above and (f) provide an updated Parking and Travel Plan which shall address the negative impacts identified in the Annual Performance Plan which shall thereafter be submitted to, and approved in writing by, North Norfolk District Council prior to the anniversary of the previously approved Travel Plan.

- 9.6 My reservation in respect of using a condition is that it would limit the scope of remedies. My suggestion would therefore be to consider what would be the most appropriate planning tool to manage parking demands once the Parking and Travel Plan has been submitted for consideration.
- 9.7 With regard to the issue of on-street parking, I would advise that on-street parking arising from new development should not necessarily be construed as

a matter causing highway safety problems. Much depends on where people park and how this affects other drivers and pedestrians using the street, hence the need for further work as explained earlier.

9.8 In the context of the NPPF advice that ***“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety or the residual cumulative impacts on the road network would be severe.”*** I would contend that development would be acceptable, in principle, providing:

- i. The 2018 base junction capacity assessment predictions can be validated.
- ii. A Parking and Travel Plan for the primary school is submitted and agreed by the local planning authority in consultation with the highway authority.
- iii. The Parking and Travel Plan for the primary school is secured through the planning process in a way that enables a broad range of remedies to be called upon in the event that future annual monitoring reveals that its outcomes are not being realised.
- iv. Auto track analysis is submitted to demonstrate that Beresford Road and Lodge Close can function for their intended purpose.