

## REINSTATEMENT OF AN 'A' CLASSIFICATION TO THE B2231

Notations in this report

GONE – Government of the North East

KCC - Kent County Council

KHS – Kent Highway Services

Jacobs – Consultants to KHS

Swale BC – Swale Borough Council

MPC – Minster-on-Sea Parish Council

EPC – Eastchurch Parish Council

WPC – Warden Parish Council

LPC – Leysdown Parish Council

RTA- Road Traffic Accident

### BACKGROUND

Following a series of serious and fatal accidents on the B2231 Lower Road on the Isle of Sheppey, IN 2004/5 LPC sought the urgent support of the other I.O.Sheppey parishes to gain safety improvements to the B2231, particularly in the section Eastchurch to Leysdown where there is no alternative route. KHS commissioned a route study report which was published in June 2006.

Examination of the report concluded that the scope was too limited, and only considered the accident statistics for a very limited period. The Joint Parishes commissioned their own site safety assessment from TMS Consultancy who are based at the University of Warwick and provide inter-alia specialist advise on traffic management and road safety engineering.

Both reports recommended urgent safety works some of which have been carried out by KHS.

## INTRODUCTION

This report has been prepared by Cllr Peter MacDonald MSc. CMILT vice Chairman of MPC. Peter MacDonald's Masters degree is in Transport Policy, Planning, and Operations, and has extensive experience in the Road Haulage, Road Passenger, and Shipping industries both Nationally & Internationally. Peter MacDonald is a Chartered Member of the Institute of Logistics & Transport.

It became apparent following the opening of the high level Sheppey Crossing and the dualing of the A249(T) to Queenborough Corner that the highway signage routes traffic for Minster & Eastchurch on the much longer, congested, and substandard route via Queenborough Road, Minster Road, Minster High Street, Chapel Street and Chequers Road. Local knowledge considers this to be an absurd proposition.

Official complaints concerning the confusing road signage to the Highways Agency who are the responsible authority for the A249(T), revealed that the signage was that recommended to them by KHS.

KHS claim that using their traffic routing hierarchy, their traffic route to Minster and Eastchurch is via the A250 onto B2008. It would appear that KHS do not understand that from the Halfway traffic lights to Sheppey Academy (Minster College) is NOT in the Parish of Minster, however, from Cowstead Corner the whole of the B2231 to the Eastchurch boundary is in Minster. The KHS 'channelization' therefore fails to the detriment of visitors who get hopelessly lost including HGVs resulting in blockages in the very narrow single track Minster High Street and in Chapel Street.

B2231 Lower Road was the A250, KHS have been unable to explain why the change in classification was made. KHS denied that the B2231 had ever been the A250, on production of Ordnance Survey evidence, KHS had to accept that B2231 had in fact been the A250.

## METHODOLOGY

KHS confirm their own criteria for the reclassification of a 'B' road into an 'A' road is that the road needs to serve a population of 10,000. This study will examine the population statistics, and will examine the classification criteria as set out in the Kent & Medway Structure Plan 2006, in particular the Secondary Routes in the Inter-Urban Hierarchy 'A' Classification, and Primary Distributors 'A' Classification in the Urban Hierarchy. This is to ascertain if the B2231 meets the criteria and ought to be reinstated as an 'A' road.

### Appendix (A) Criteria for 'A' Road Classification

KHS state that numerical traffic flows and Road Safety, are not, and do not form part of the road classification criteria as set out in the Kent & Medway Structure Plan, however, The Department of Transport & The highways Agency office located at GONE have indicated that they consider traffic generation statistics and road safety as important factors in assessing road classification. They also insist the use of evidence of holiday traffic and the raft of factors generated by a large Prison complex are to be included.

This study will examine:-

- (1) The Population served by the B2231
- (2) Traffic Generation on B2231
- (3) RTA Statistics on B2231

This study will consider all these factors in reaching a balanced conclusion.

# POPULATION

## POPULATION

Served by The Lower Road - I.O.SHEPPEY B2231

'The B2231 connects the communities of Minster-on-Sea, Eastchurch, Warden, and Leysdown with the A249 (T)'. \* quote JACOBS/KCC Study 07-09-09

### POPULATION

Eastchurch	2,950
Leysdown	1,300
Minster	13,520
Warden	1,850
TOTAL	19,620

To this total must be added :-

\*Road Classification Section  
Government Office of N.E.

Prisoners	2,500
Employees	1,200
TOTAL	3,700

Prison Visitors :- Although a large number of visitors attend at the Prisons no numbers are used in this part of the study, they appear in the traffic generation statistics.

50% of the County of Kent's caravan and chalet accommodation is located in the 37 holiday camps and caravan parks located in Minster, Eastchurch, Warden, Warden Bay, and Leysdown, ALL SERVED by the Lower Road B2231. The holiday accommodation \*, (7,000 caravans and chalets 8 to 10 month occupancy), has an average occupancy of 6 persons per Unit\*. In order not to show bias, this study will only use a 25% occupancy.

\*quote Swale BC + \*The Economic Impact of Tourism on Swale report 2006 - Tourism South East.

7,000 X 6 =	42,000
25% =	10,500
TOTAL	10,500

TOTAL POPULATION as discussed with the Road Classification section for England which is based at the Government of The North East using approved methodology is:-

19,620	
3,700	
10,500	= Existing Population served by B2231 = 33,820

# TRAFFIC GENERATION

## TRAFFIC GENERATION

TRAFFIC DATA B2231 Lower Road I.O.Sheppey  
Derived from traffic statistics held by Jacobs/KCC

The Highway Authority for the B2231 Lower Road on the Isle of Sheppey is Kent County Council.

Kent County Council have not undertaken any recent traffic counts. It is proposed to examine such historical data (2006) which is available to the Highway Authority, & extrapolate the results making use of the National trends in traffic generation. Average +5% each year.

+0% has been used for 2009 to allow for the recession and high fuel prices. This gives a +10% to be used in the extrapolation calculations from the 2006 base.

Traffic counts for the A249 (T) (highways agency) which is the only road system for traffic to and from the I.O.Sheppey, give an increase of 11.96% for the 3 year period 2006 to 2009, to avoid bias this study reduces this to a 10% increase.

KCC have no statistics available on the busiest part of the B2231, ie between A249(T) at Cowstead Corner and the Thistle Hill development. Traffic to and from B2231 destined to or from Minster extensively use Barton Hill Drive and Thistle Hill Way. In the absence of any data, it is proposed to extrapolate the Thistle Hill data by a modest 10%.

No traffic count data is available for the School Holiday period :- Last week in July to 2<sup>nd</sup> week in September, which is the peak period for visitors.

50% of the County of Kent's caravan and chalet accommodation is located in the 37 Holiday camps and caravan parks located in Minster, Eastchurch, Warden, Warden Bay, and Leysdown, all served by the B2231. This holiday accommodation (7,000 caravans and chalets) is a major traffic generator. In order not to show a bias, it is proposed to add just 5% to the non school holiday period traffic count data.

## FURTHER TRAFFIC GENERATION FACTORS TO BE CONSIDERED

- (1) The Brambledown hazardous waste dump, has just started to come on stream following the re-commissioning of the KCC incinerator located at Allington near Maidstone. Waste ash is being transported in 44 tonne articulated sealed road tankers at an inward rate of 7 vehicles per day so far, which equates to 14 movements per day on the B2231.
- (2) The Eastchurch prison cluster consists of 3 major prisons:- Stamford Hill, Elmley, and Swaleside. These prisons are currently being expanded, with construction taking place. There is an ever increasing traffic generation by:- prisoner movements including court cases, out-work, visitors, deliveries, food, laundry, Prison Industry traffic, employees, warders, office staff, and education staff. Consideration is being given to the possible construction of a further facility for young offenders. All traffic uses the B2231.

The current prison population is 2,500 inmates and 1,200 staff.

- (3) Residential developments served by the B2231.

A further 1,000 houses are being constructed on the major Thistle Hill development site. This development is served by the B2231 generating further major traffic flows. Developers of the green land Thistle Hill development site are seeking to increase the number of dwellings to 1,750.

- (4) The design capacity of a single carriageway road is 13,000 vehicle movements per day. The statistics show that this total is already even being exceeded in the quieter East of the Thistle Hill development, Westwards between this development and the A249(T) at times the road is already becoming grossly overloaded, up to 4,500 vehicles per day above the theoretical capacity of the road.



(5) New Hook grain store and processing plant

The capacity at any one time of this plant is 21,000 tonnes making a traffic generation requirement of 42,000 tonnes made up by the tonnage in and the tonnage out. Using maximum capacity hgv's vehicle movements will be a minimum of 2,800, the applicant's stated policy is to store the grain to obtain a better price, this will effectively eliminate back loaded movements.

Any warehouse capacity is the total tonnage at the store at any one time, in the case of New Hook 21,000 tonnes converts to 42,000 tonnes of movement. Throughput could increase tonnages and therefore traffic movements by many multiples.

Swale Borough Council refused Planning Permission rightly recognising that a trebling of the size of the operation would place an undue burden on an inherently dangerous and overloaded road. The applicants have appealed to the Secretary of State. The result of the appeal is awaited, but it should be formally recorded that despite representations to them KHS gave no support to Swale BC or MPC and this gave unreasonable encouragement to the applicant's case.

TRAFFIC COUNT DATA B2231 Lower Road I.O.Sheppey

From KCC raw statistics

Design capacity of a single carriageway road = 13,000 vehicle movements per day

KCC

LOCATION On B2231	DATE	EAST	WEST	RAW TOTAL	EXTRAPOLATED	
					TOTAL summer +5%	TOTAL 2009 +10%
Brambledown Ref. 20050211	Thurs. 08-09-05	4342	4678	9020	9471	11,365
South Lees Ref.20060128	Thurs. 13-07-06	4962	5111	10,073	10,577	11,635
	Frid. 14-07-06	6228	5293	11,521	12,097	13,307
	Sat. 15-07-06	6203	5848	12,051	12,654	13,919
	Sun. 16-07-06	5530	7732	13,262	13,925	15,318
	Mon. 17-07-06	4795	5263	10,058	10,561	11,617
	Tues. 18-07-06	5046	5210	10,256	10,769	11,848
	Wed. 19-07-06	5330	5595	10,925	11,471	12,618
Thistle Hill Ref. 20060127	Thurs. 13-07-06	5325	6113	11,438	12,010	13,211
	Frid. 14-07-06	6269	6284	12,553	13,181	14,499
	Sat. 15-07-06	6344	6556	12,900	13,545	14,900
	Sun. 16-07-06	5656	8247	13,903	14,627	16,090
	Mon. 17-07-06	5175	6176	11,351	11,919	13,111
	Tues. 18-07-06	5306	6119	11,425	11,996	13,196
	Wed. 19-07-06	5747	6523	12,270	12,884	14,172
Cowstead Cnr. B2231 Extrapolated	Thurs. 13-07-06	5858	6724	12,582	13,211	14,532
	Frid. 14-07-06	6896	6912	13,808	14,499	15,949
	Sat. 15-07-06	6978	7213	14,190	14,900	16,390
	Sun. 16-07-06	6222	9072	15,293	16,090	17,699
	Mon. 17-07-06	5693	6794	12,486	13,111	14,422
	Tues. 18-07-06	5837	6731	12,568	13,196	14,516
	Wed. 19-07-06	6322	7175	13,497	14,172	15,589

Extrapolated

## RTA DATA

## ACCIDENT STATISTICS B2231 Lower Road I.O.Sheppey

Derived from Kent police data on RTA's held by Kent County Council.

Far from being the safe road as claimed, the B2231 has more personal injury accidents than the National Average per km for a 'B' classification road. For most of its length there are no footpaths or cycle-ways, it is little used by pedestrians or cyclists who perceive it as being too dangerous.

The statistics examined are those from Cowstead Corner (Junct. B2231 & A249(T)) to White Post Corner (Junct. B2231 & B2008).

Total RTA Casualties:-

5 year period to 30-06-09 + 1 RTA near Brambledown 1ftl. + 2ser. 15<sup>th</sup> Aug. 2009

TOTAL 51 RTA's involving personal injury. No statistics are available for the numerous RTA's which did not result in reportable injuries.

The 51 RTA's resulted in 75 persons suffering personal injury or death.

5 year total	2008/9
2 Fatal	1 Fatal
10 Serious injuries	6 Serious injuries
63 Slight injuries	7 Slight injuries

There has been a small reduction in the number of personal injury RTA's on the B2231, (A249(T) to B2008 in the year June 2008 to June 2009, however there has been a marked increase in their severity.

7 slight injuries, 6 serious injuries, and 1 fatal.

These casualties give a serious + fatal to slight injury % of 50% against Kent County Council's 15% for 'B' classification roads.

It would appear that KHS need to urgently examine what possibilities there are to reduce the number and seriousness of RTA's on the Lower Road B2231.

## CONCLUSION

The case for the reinstatement of the 'A' classification for the Lower Road I.O.Sheppey is overwhelming.

KHS's Consultants attempts to manipulate the statistics by removing Minster from the scenario fails, even without the Minster Population, the population served by the B2231 at 20,300 \* far exceeds the 10,000 required for reclassification.

The criteria set out in The Kent & Medway Structure Plan 2006 stipulates a population requirement of 10,000. The Road Classification section of The department of Transport based at GONE, stipulate the Prison Population and the Holiday Population have to be included\*.

This study has been very rigorous but conservative in it's extrapolations in order not to give biased results. The minimum population even without Minster's at 20,300, far exceeding the population required for reclassification. With Minster's population added, by correcting KHS's erroneous use of their own channelization rules, the rapidly growing Minster population has to be included. The population to be counted therefore is 33,820 against a notional requirement of 10,000.

\*using the Dept. of Transport's own Road Classifications criteria which uses all population as the basis for food distribution and other essential transport.

The KHS's traffic count data for 2006 demonstrates that that section of the B2231 between the A249(T) and Barton Hill Drive, exceeds the notional capacity of the road on most days of the week. In summer the capacity is exceeded everyday. In the 3 years since 2006, traffic has grown by 11.96%, the effect of this growth is that the B2231 on this section is grossly overloaded on most days.

In the past 12 Months 2008/9, there has been a marked deterioration in the severity of personal injury on the B2231, with 1 fatality 6 serious injuries and 7 slight injuries in the section A249(T) to Brambledown. The result is that the ratio of serious to slight injuries is 50% against a Kent County 15% for B classified roads.

The conclusion is that the B2231 should be reclassified with immediate effect, with meaningful discussions on the way forward for all the issues.



# **Proposed B2231 Reclassification**

Project: Road Classifications  
Document Title: Proposed B2231 Reclassification  
Job No: KHSB1254800

<b>ORIGINAL</b>	<b>Originated by</b>	<b>Checked by</b>	<b>Reviewed by</b>	<b>Approved by</b>
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<b>Document Status</b>	Final			

The B2231, Lower Road, is a single-carriageway road, running on a west-east alignment for 11.7km across the Isle of Sheppey from its junction with the A249 (T) outside Queenborough. The B2231 connects the communities of Minster-on-Sea, Eastchurch, Warden and Leysdown with the A249 (T) and is the only classified route for the communities of Eastchurch, Warden and Leysdown. The B2231, Lower Road, is predominantly rural in character, with a 60mph speed limit over most of its length, becoming 40mph at Bayview and 30mph in Leysdown-on-Sea, according to KHS (2007). The Maintenance Hierarchy designates the B2231 as 'Other Strategic'.

The potential reinstatement of the B2231 to the A250 was raised by Mr. Peter MacDonald, Chairman of Minster Parish Council, at the Swale Joint Transport Board on 16<sup>th</sup> June 2008. His hope is that reclassification of the B2231 will ensure that the B2231 receives greater maintenance priority and funding to improve it to a sufficient and adequate standard. However, road classification gives the relevant highway authority more control over where the traffic goes and therefore ensures that the road network can be as free flowing as possible. Road classification, therefore, predominantly focuses upon the channelisation of traffic, rather than road maintenance or improvement.



A functional hierarchy of roads in the County is essential in order to channelise traffic onto the most appropriate routes. The hierarchy should be reflected in road classification (A, B roads etc.). The Government Office of the North East (GONE) states that A-roads are the more important highways that connect large centres of population, and are of importance from the point of view of through traffic, while classified numbered roads (B-roads) are those that form important links between A-roads and smaller centres of population. The Road Hierarchy criteria for classification, in the Kent and Medway Structure Plan 2006 (Appendix A), focuses upon population centre connections and, therefore, assessment of population must be conducted when considering reclassification.

### **3.1 Population**

The B2231 connects four population centres to the A249 (T); Minster-on-Sea, Eastchurch, Warden and Leysdown. To assess whether the B2231 should be re-classified; resident population figures for each district must be evaluated according to whether they satisfy the criteria contained in Appendix A. The resident population figures utilised are those published by the Office for National Statistics (ONS) in May 2009 entitled, '2007 Parish Level Population Estimates'. These figures are the most recent official figures available from ONS, based upon a Post Code Best Fit Methodology which was utilised as it "is versatile and easy to implement to overcome the difficulty of producing annual population estimates while boundaries are subject to periodic review and change...(The Post Code Best Fit methodology) is an Apportionment method, apportioning population estimates for LSOAs (Lower Layer Super Output Areas) to unit postcode level based on age and sex information from patient register postcode level data" (ONS, 2009b). The patient register is the NHS register which includes all those persons registered with a doctor. "A special allowance is made for population sub-groups not included on the patient registers, covering prisoners, UK armed forces and foreign armed forces" (ONS, 2009b).

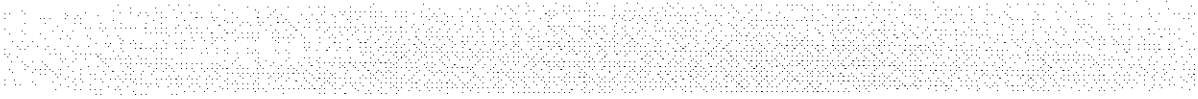
The ONS does not hold data regarding caravan population figures; as a consequence these populations can not be included in an analysis of population as no official data exists. However, ONS states permanent caravan sites may be included in the Patient register as it is likely that residents will have registered with a doctor.

#### **3.1.1 Minster-on-Sea**

The parish of Minster-on-Sea contains approximately 13,500 people, according to the Office of National Statistics (see Appendix B), with 4 schools in the area and one of the fastest growing housing developments in Kent, Thistle Hill (KHS (2007)). Thistle Hill is one of the housing developments contained in the Thames Gateway Housing Development Scheme, comprising 1000 houses. It is clear from Appendix B that the population of Minster-on-Sea satisfies the population criteria, highlighted in Appendix A and the GONE definition for an A-road. However, the A250 currently serves Minster as the secondary route connecting the Minster population to the A249 (T), whilst Thistle Hill housing development is within 5 miles of the A249 (T).

#### **3.1.2 Eastchurch, Warden and Leysdown**

The population of the parish of Eastchurch is approximately 2,900 people (see Appendix B). The population of Eastchurch, therefore, does not satisfy the criteria of an A-road classification as stated in Appendix A. The B2231 is the only publicly available access route to the communities of Leysdown and Warden, with a combined population of 3,100, according to the Office of National Statistics (see Appendix B). The population of Warden and Leysdown, therefore, does not satisfy



This study has highlighted that the population of Minster-on-Sea requires a secondary route connecting the settlement with the primary route, the A249 (T). However, the A250 already satisfies the requirement for a secondary route. The significant populations in the reclassification of the entire B2231 are, therefore, the populations of Eastchurch, Warden and Leysdown. However, through analysis this report has found these populations to satisfy a B-road classification.

In conclusion, according to the information concerning population centres, the B2231 does not satisfy the criteria to be reclassified as an A-road. Evidence shows that with Minster served by the A250, as a secondary route, to the A249 (T), the B2231 meets the local route criteria for a road serving the populations of Eastchurch and Leysdown.

the criteria for an A-road classification, as stated in Appendix A. The total population figures for Eastchurch, Warden and Leysdown is 6,000, therefore, the populations of Eastchurch, Warden and Leysdown do not satisfy the criteria for an A-road classification.

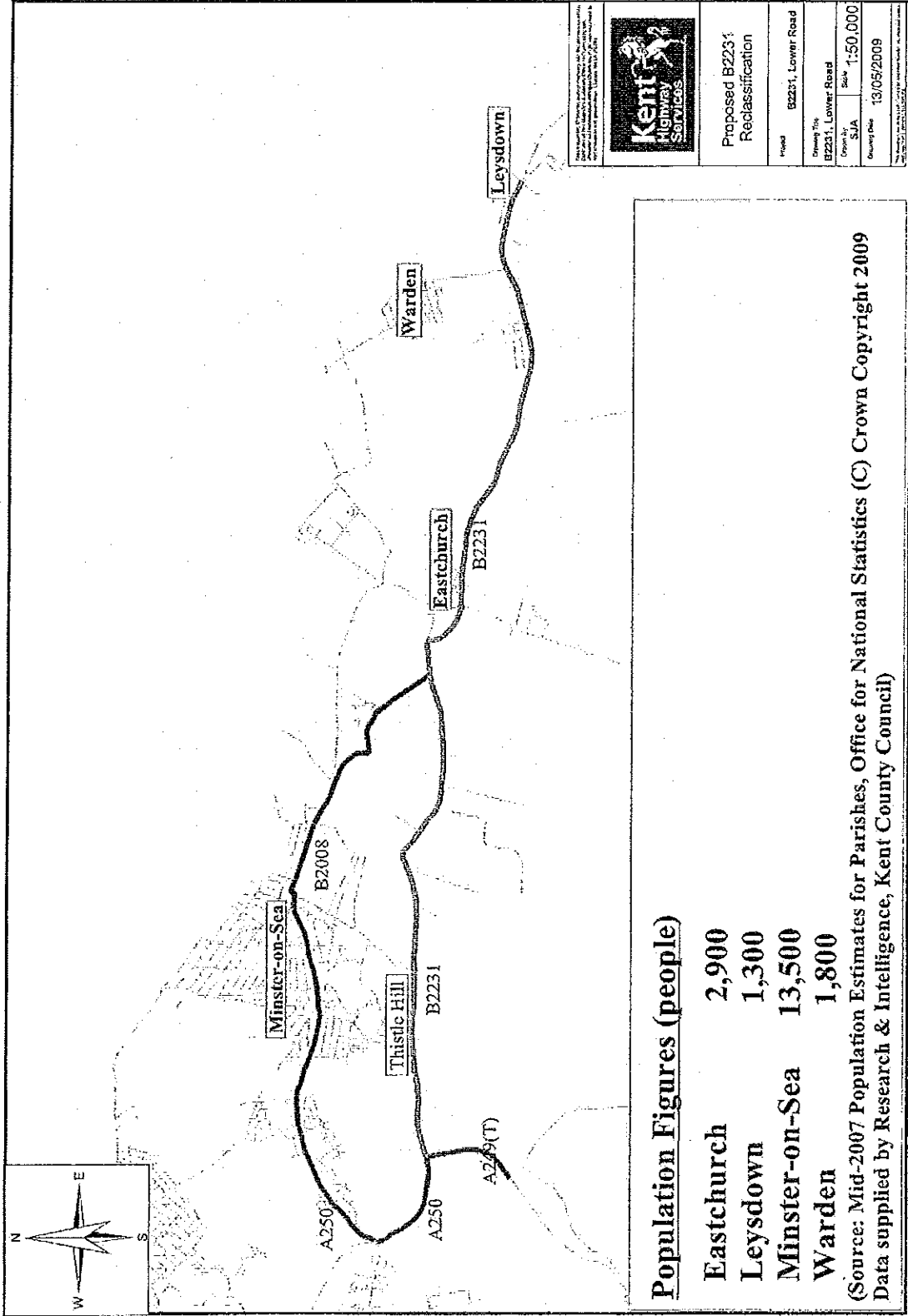
Source: KCC and Medway Council (2006), Kent and Medway Structure Plan 2006

**A: INTER-URBAN HIERARCHY**

Designation	Description	Classification
(i) Primary Routes	Inter-urban routes which Kent and Medway Councils have selected, in agreement with the Department for Transport, to provide access to within five miles of the larger urban centres in Kent and Medway (those with populations of 25,000 or more) and other strategic centres of traffic generation such as the county's ports and the Channel Tunnel terminal. These roads support the national road network in carrying substantial international and inter-regional traffic.	Motorways
		Trunk Roads
		Primary 'A' Roads
(ii) Secondary Routes	The preferred routes linking urban centres with populations of 25,000 or more to the Motorway and Primary Route Networks and providing access to within five miles of smaller urban centres with population exceeding 10,000. Routes which do not meet these criteria but which provide a parallel alternative to a Motorway or Primary Route may also be selected as Secondary Routes.	Other 'A' Roads
(iii) Local Routes	The preferred routes linking urban centres with populations larger than 3,000, or connecting them to a higher category of road, where an alternative access does not exist, are classified as B roads. Those routes linking together, or providing access to, smaller settlements are classified as C roads.	'B' roads or 'C' roads
(iv) Access Roads	The remainder of the inter-urban network which provides access to, and from, the higher classes of road.	Unclassified roads

**B: URBAN HIERARCHY (Based on the distributor road system of Local Plans)**

Designation	Description	Classification
(i) Primary Distributors	• Through routes to the urban area	Continue classification of inter urban road
	• Linking separately identifiable communities with populations greater than 10,000	'A' Road
	• Linking separately identifiable communities with populations of between 3,000 and 10,000	'B' Road
(ii) District/ Secondary Distributors	• Linking separately identifiable communities with populations of between 3,000 and 10,000 with each other or to the Primary or Secondary Route Network	'B' Roads
	• Linking separately identifiable communities with populations of less than 3,000 with each other or to the Primary or Secondary Route Network	'C' Roads
(iii) Local Distributors	• As shown on Local Plans	Unclassified
	• Not specifically mentioned in Local Plans	Unclassified
(iv) Access Roads		Unclassified



**Kent Highway Services**

Proposed B2231  
Reclassification

Project: B2231, Lower Road

Order No: SJA

Scale: 1:50,000

Issue Date: 13/05/2009

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