



UTTLESFORD DISTRICT COUNCIL



AIR QUALITY ACTION PLAN 2009

SAFFRON WALDEN

AIR QUALITY MANAGEMENT AREAS

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1. Introduction

The Environment Act 1995 Part IV provides the legislative framework for Air Quality duties and powers and requires Local Authorities to declare Air Quality Management Areas in locations where the National Objectives for health related air pollutants are not being met.

The National Air Quality Strategy was first published in 1997 and has been periodically revised and updated, the current Air Quality Strategy was published in 2007 and includes objectives for a number of health related pollutants.

Following long term monitoring of air quality in the centre of Saffron Walden it became apparent that at three 'hot spots' the annual mean objective for nitrogen dioxide (NO₂) of 40µg/m³ was being consistently exceeded and 3 Air Quality Management Areas were declared in July 2007.

The Council's aim is to work with others to reduce the nitrogen dioxide levels to below the Objective level. The Saffron Walden Town Centre Management Working Group has been tasked with overseeing the process and a draft action plan for local consultation on the measures which have been identified for further consideration and evaluation was issued on the 1st December 2008 and the responses considered at the meeting of the Working Group on the 23rd January 2009.

2. The National Air Quality Strategy 2007

The original Strategy was introduced in 2000 and has been amended and refined since then, the current document was published in July 2007 following consultation in 2006. In the section on Local Air Quality Management paragraph 56 is reproduced below.

The UK Government and the devolved administrations strongly believe that air quality issues should be dealt with in a holistic and multi-disciplinary way.

In drawing up action plans, local authority environmental health/pollution teams are expected to engage local authority officers across different departments, particularly, land-use and transport planners to ensure the actions are supported by all parts of the authority. In addition engagement with the wider panorama of relevant stakeholders, including the public, is required to ensure action plans are fit-for-purpose in addressing air quality issues. It is vital that all those organisations, groups and individuals that have an impact upon local air quality, buy-in and work towards the objectives of an adopted action plan.

3. Aims and Objectives

The Council's aim is to achieve a reduction in nitrogen dioxide levels to below the annual mean value of $40\mu\text{g}/\text{m}^3$ in each of the 3 AQMAs as soon as possible. In the early 2000's it seemed that improvements in road vehicle engine technology would bring the annual mean value to below the objective without any specific intervention at a local level, however the results of monitoring have shown a levelling off in this effect, due in part to increases in traffic and to other factors such as an increase in the primary amount of NO_2 emitted from vehicle exhausts.

A series of meetings have been held with officers from Essex County Council's Highways and Transportation Team to start the process of developing the action plan and presentations have been given to the Saffron Walden Town Council and Uttlesford Transport Forum. The views of all interested parties in the ideas and suggestions in this document have been considered and taken forward in preparing this Action Plan.

4. Uttlesford Local Plan and Essex Local Transport Plan

The current Uttlesford Local Plan was adopted in January 2005 before the AQMAs were declared but nevertheless there is a small section on Air Quality and a specific policy, ENV13, which relates to development in areas with a long term poor air quality, and is reproduced below:

Air Quality

- a. The Council's air quality management strategy has identified that, based on traffic forecasts, poor air quality is anticipated alongside the M11 and the new A120. Since both run through the open countryside where there is strict control on new buildings it is unlikely there will be many proposed developments close to either road. The widths of the zones are based on Government standards for the traffic levels predicted. The extent of the zones is based on Local Air Quality Management Technical Guidance Note 3 in respect of Nitrogen Dioxide using the Design Manual for Roads and Bridges Screening Model.

Policy ENV13 – Exposure to Poor Air Quality

Development that would involve users being exposed on an extended long-term basis to poor air quality outdoors near ground level will not be permitted. A zone 100 metres on either side of the central reservation of the M11 and a zone 35 metres either side of the centre of

the new A120 have been identified on the proposals map as particular areas to which this policy applies.

The Local Plan is progressively being replaced by the Local Development Framework which will include specific local development documents. It is anticipated that there will be a document within the framework which addresses development which has the potential to influence air quality in general and more specifically air quality in the AQMAs.

The Essex Local Transport Plan contains a number of general measures aimed at reducing the impact of road transport on air quality. The LTP acknowledges that to improve air quality there is a need to reduce road transport.

The 2008 Progress Report on the LTP recognised that parts of Saffron Walden have poor air quality and that Essex will be looking at ways to deal with local congestion in the near future.

5. Identifying the Problem.

AQMA no 1 is centred on the junction of High Street and George Street and extended 75 metres in all directions from that point. There are a number of first floor flats above retail and office buildings in that area. Traffic lights operate at the junction to allow traffic to turn into the George Street one way system or into Abbey Lane, and at busy periods traffic can be queuing over 250 metres back from the junction in both directions. These busy periods are during the morning school run and local commuting and again in the late afternoon and early evening for the same reasons. HGVs also use this junction to travel to the east side of the town where the main industrial areas are located (Shirehill and Ashdon Road).

AQMA no 2 is centred on the junction of High Street and Castle Street and extends 50 metres in all directions from that point. Houses in the immediate area are very close to the carriage way and as the High Street leads on to Bridge Street the road narrows and vehicles routinely stop to allow oncoming traffic to pass. A traffic survey carried out by local residents in 2003 showed peaks between 8am and 9am and 5pm and 6pm, it also identified a number of HGVs entering the town from the north which is not permitted.

AQMA no 3 is centred on the junction of Thaxted Road with East Street and Radwinter Road and extending 50 metres in all directions from that point. There are a number of houses and bungalows within this area and a local convenience store. Traffic lights operate at this busy junction which is the main route into the town from the Dunmow direction and leads to an edge of town supermarket. HGVs making their way to the Shirehill Industrial Estate or to industrial sites on the Radwinter Road also use this junction. At busy times traffic can be queuing for over 500 metres along the Radwinter Road, over 300 metres along the Thaxted Road and 200 metres along East Street.

In September 2004 the Saffron Walden Initiative published a Saffron Walden Heathcheck which contained a large number of observations, comments and objectives concerning traffic congestion, traffic management, parking, and

public transport. Some of the objectives have been or are being actioned by the relevant organisations or authorities but many others are still aspirations. A comprehensive public survey was carried out and traffic congestion, traffic calming, pedestrian and cyclist safety, and weak public transport including access to Audley End Station, were all identified as issues of major concern amongst respondents.

Maps of the three AQMAs are included in Appendix 1

6. Defining the Problem

Sources of Nitrogen Oxides, known collectively as NO_x are principally the result of combustion processes such as electricity production, industrial processes and from road traffic. In this case there are no significant industrial sources and the prime source is road traffic related.

The mean annual value when bias adjusted for 2007 show a slight drop to below the 40 µg/m³ objective in AQMA no 1 (37µg/m³) and AQMA no 2 (36 µg/m³) and an excess in AQMA no3 (43µg/m³) and tends to reinforce the view that levels are at or about the annual mean objective and that reductions in traffic sources must be the target of the Action Plan to ensure the trend is downwards rather than flat.

Since the draft Action Plan was produced results for 2008 are now available and show an upwards trend, AQMA no 1 42.9µg/m³, AQMA no 2 45.2 µg/m³, and AQMA no3 53.4µg/m³. It has been calculated that total NO_x reductions of 8% at AQMA no 1, 13% at AQMA no 2, and 35% at AQMA no 3, would be needed to reach the 40 µg/m³ objective for NO₂.

In addition a new monitoring site at the junction of Debden Road and Audley Road gave results above the objective at 45.4 µg/m³, and will be monitored during 2009 before a decision is made on declaring a new AQMA or modifying the existing areas.

7. Proposed Measures

The management of local traffic is an Essex County Council function and meetings have taken place with the Highways and Transportation Team to develop a series of measures that will bear down on traffic congestion and not relocate problems elsewhere within the Town. It is proposed that comprehensive traffic data be obtained and a simple model developed to test different proposals and assess the benefits and any adverse knock on effects.

Matters being considered include:

School Travel Plans aimed at reducing car journeys by parents, pupils and staff and the School Travel Plan Coordinator has been contacted with a view to assisting local schools to develop plans. The government have set a target of 2010 for all schools to have such plans in place and specific funds are available for suitable on-school projects such as improved paths and cycle storage facilities.

Business Travel Plans can be included as a requirement associated with planning permission for developments. This is an area where Uttlesford DC can directly affect traffic congestion by completing the process of developing a travel plan for its own staff based at the London Road offices. Matters for consideration include using public transport, car sharing, working from home, staggering working hours and encouraging the use of low emission vehicles. Since the consultation on the draft Action Plan the Council has signed up to the *liftshare.org* web based car sharing scheme.

Public Transport has an important part to play both in increasing services and improving information on existing services. The Saffron Walden Healthcheck identified journeys to and from Audley End station as an area where improvements can be made and suggested a shuttle bus service and a cycle path between the Town and the station. Following the consultation on the draft Action Plan a local bus operator has extended the timetable for journeys between Saffron Walden and Audley End to enable travellers to access off-peak day return tickets to London. In addition the recent planning permission to extend the car park at the station included a condition to improve the bus stop facilities for passengers, however a dedicated cycle path is not likely to be constructed.

'Congestion Busting' schemes were considered by Essex County Council at the three locations of concern. However following the consultation on the draft Action Plan all three schemes were withdrawn. The proposals for improvements at the junction of High Street and George Street, High Street and Castle Street received much adverse comment from local residents and the proposals for the junction of Thaxted Road with Radwinter Road and East Street were considered too expensive by Essex Highways. The original proposals are appended to this report as Appendix 3.

Signage to car parking facilities could be improved to prevent unnecessary circulation by confused drivers hunting for car parking spaces and consideration could be given to offering concessionary car parking charges to low or zero emission vehicles.

The movement of HGVs was identified as a particular issue within the Town and Essex County Council is developing a Sustainable Distribution Strategy which may be able to address some of these issues.

These proposals are assessed for their cost benefit analysis in Appendix 2

8. Next Steps

The measures to improve air quality need the cooperation and involvement of a wide range of stakeholders, Uttlesford District Council, Saffron Walden Town Council, Essex County Council's Development Highways and Transportation Directorate, local schools, local businesses, and most importantly local people. The draft Action Plan gave all these stakeholders an opportunity to respond to the proposals and the final Action Plan has incorporated the responses. A summary of the responses to the specific proposals in the draft plan is in Appendix 4

Appendix 1

Figure 1 – Uttlesford AQMA No. 1 – High Street/George Street, Saffron Walden

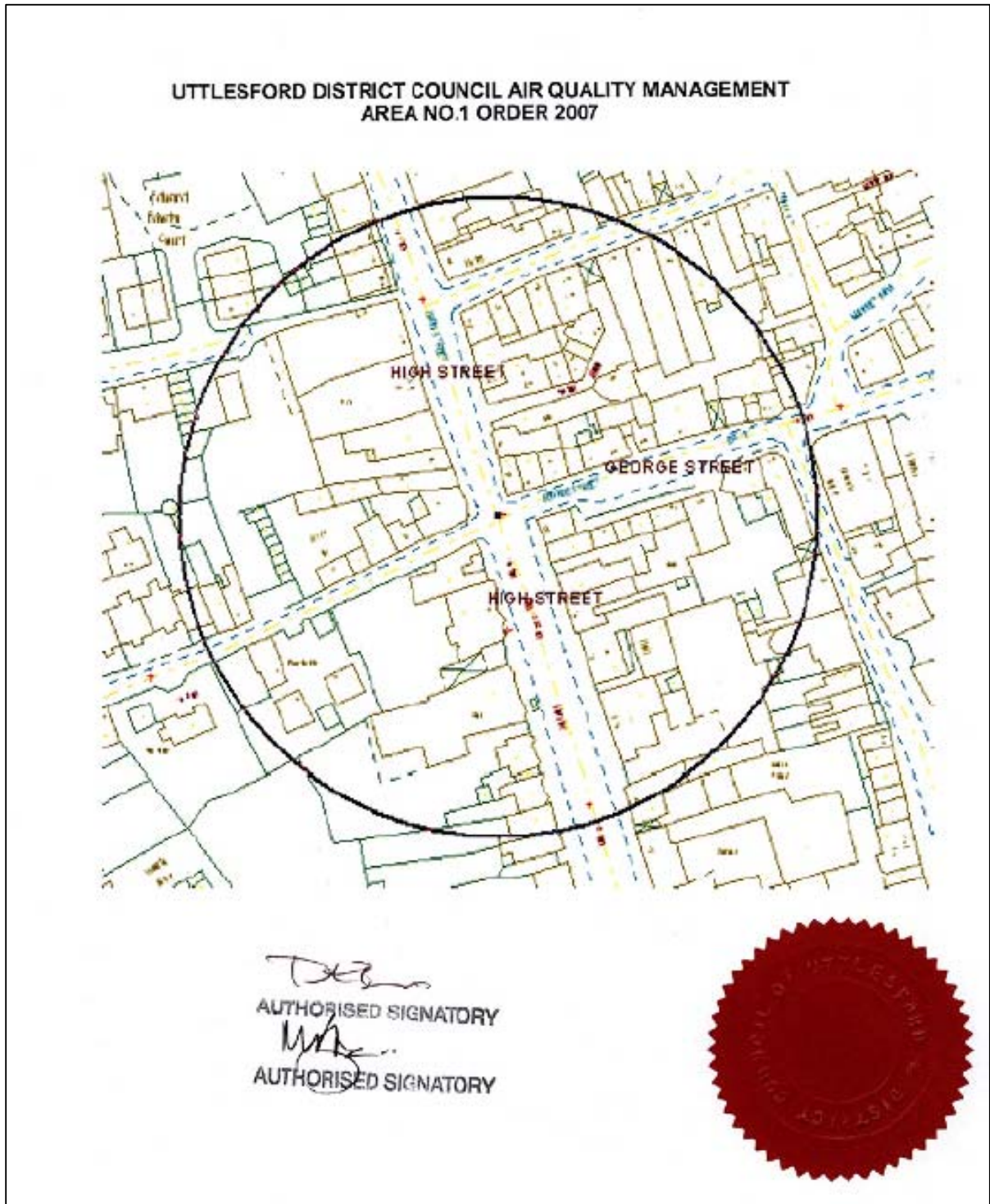


Figure 2 – Uttlesford AQMA No. 2 – High Street/Castle Street, Saffron Walden

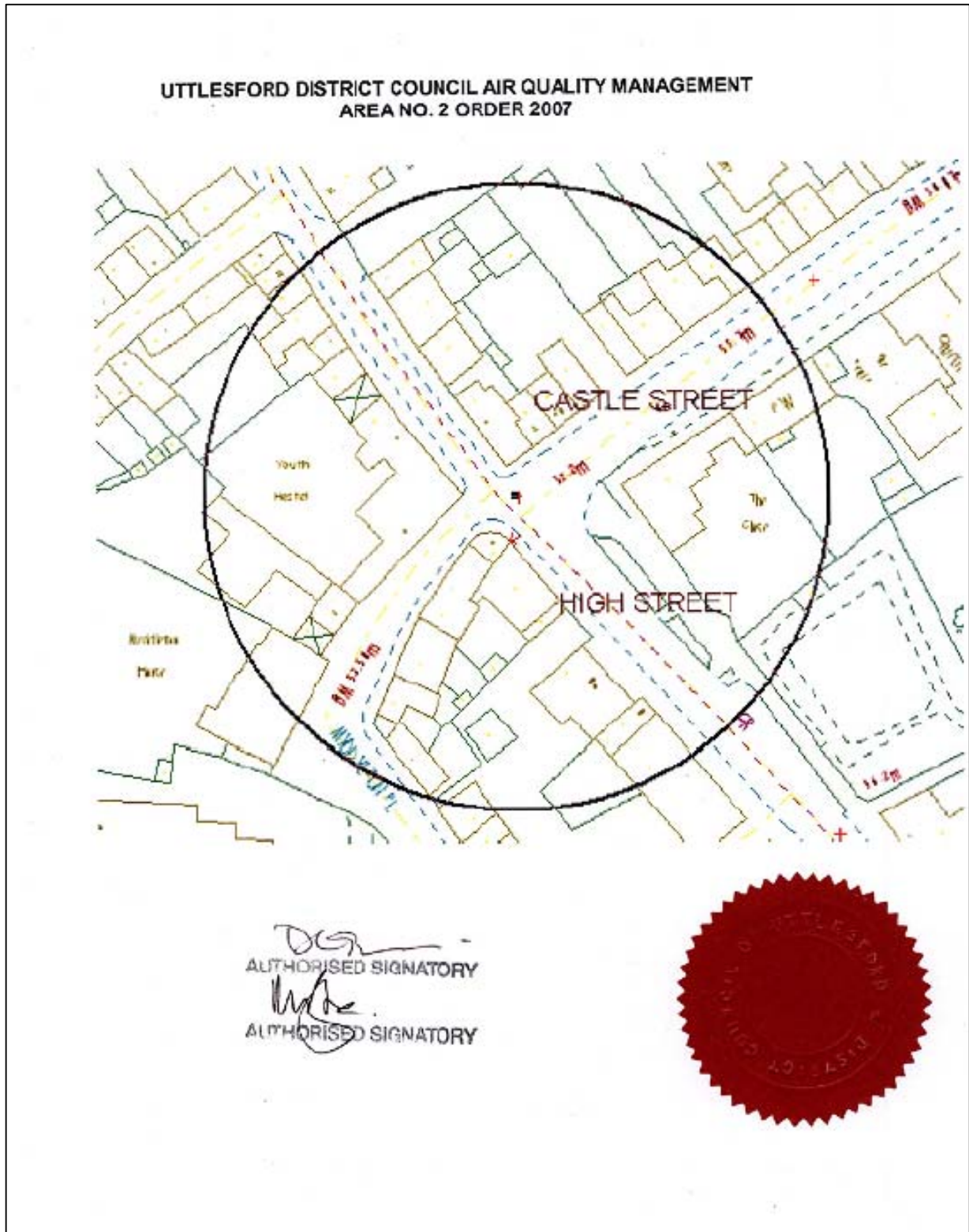
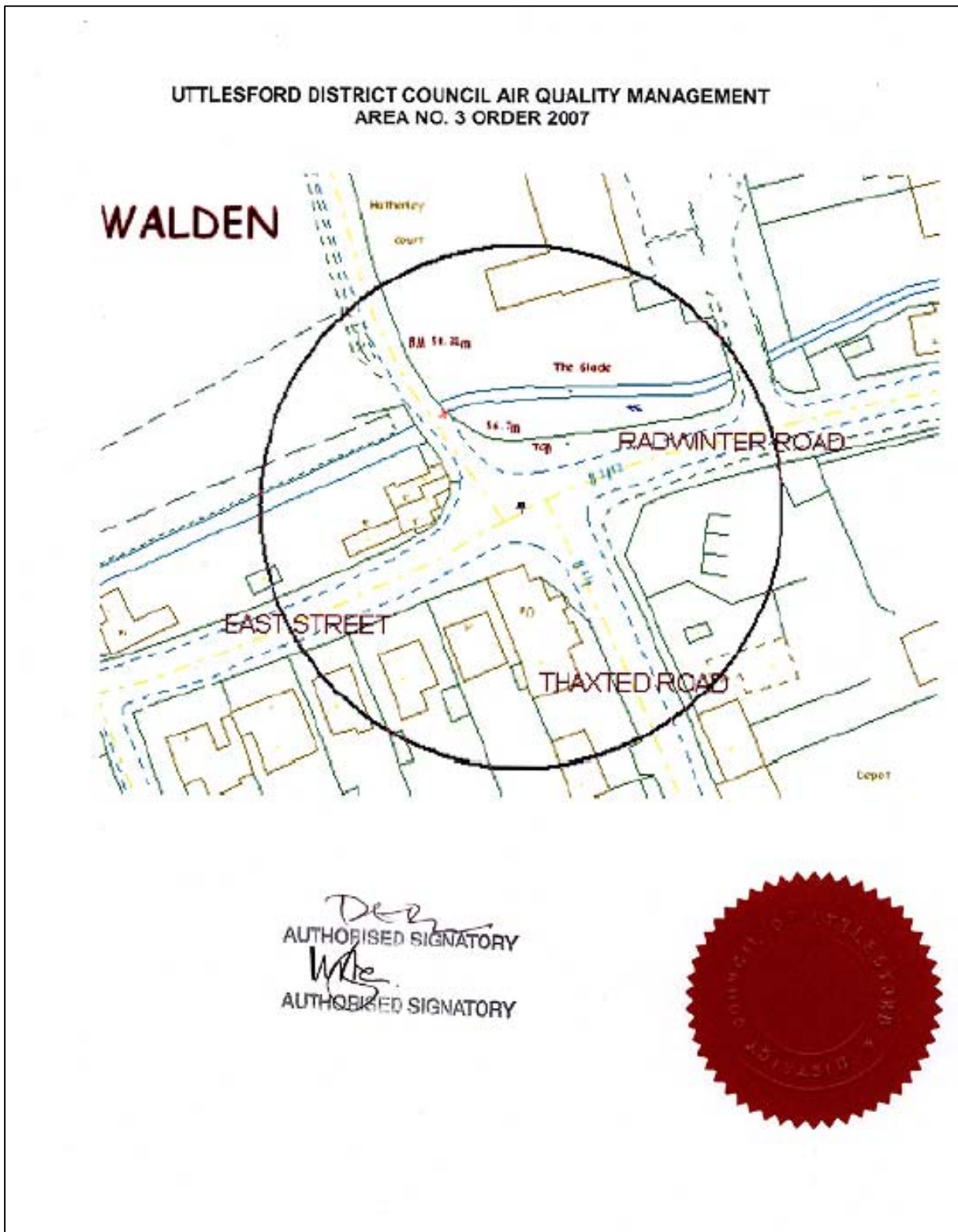


Figure 3 – Uttlesford AQMA No. 3 – East Street/Thaxted Road, Saffron Walden



Appendix 2

Method of Assessing Proposals

Air Quality Impact Banding	Definition
Low (1)	Impact is small and localised. Will be beneficial as part of a wider measure
Medium (2)	Impact is considered important with benefits clearly seen
High (3)	Impact is considered significant and the action is considered necessary to achieve the objectives

Cost Banding	£	Description
Low (3)	<50k	Cost is covered in existing budget or is below £50,000
Medium (2)	50k to 200k	Additional funding is required
High (1)	>200k	Significant extra funding required

Cost Benefit Assessment Matrix			
Cost x Impact = Effectiveness	High Impact (3)	Medium Impact (2)	Low Impact (1)
High Cost (1)	3	2	1
Medium Cost (2)	6	4	2
Low Cost (3)	9	6	3

Proposed Measures

Action	Who	When	Cost	Air Quality Impact	Cost Benefit Assessment
School Travel Plans	Essex County Council	2010	Low	High	9
Business Travel Plans	Uttlesford District Council and Essex County Council	2009	Low	Medium	6
Public Transport Improvements	Essex County Council and Private Operators	Ongoing	Medium	Medium	4
Congestion Schemes	Essex County Council	As opportunities become available	High	High	3
Car Parking Signage	Essex County Council	For consideration in 2010	Low	Low	3
Car Parking Concessions for Low Emission Vehicles	Uttlesford District Council	For consideration in 2010	Low	Low	3
Limits to HGV Movements	Essex County Council	As opportunities become available	High	Medium	2

Appendix 3.

Original 'Congestion Busting Proposals'

The area of Bridge Street between Freshwell Street and Castle Street that is narrow will be changed to give way to ongoing coming traffic with priority to vehicles from the Castle Street end.

The junction of High Street / George Street and Abbey Lane will have the signals taken out of action and vehicles travelling from the north down the High Street will have a normal give way at the junction. A yellow box will be put on the junction and a new zebra crossing installed on the High Street to the north of the junction. A new kerb build-out area will be installed in George Street to assist pedestrians crossing the road just before the lay-by on the right.

The junction of Radwinter Road and Thaxted Road will be altered to accommodate two lanes of queuing traffic on Radwinter Road when approaching the junction from the east. The inside lane will be marked for straight ahead and left turn, the outside lane will be marked for straight ahead and right turn. This scheme will involve widening of Radwinter Road on both sides on the approach to the junction with some widening of the kerb line around the junction itself.

Appendix 4

Comments from the Consultation

'All partners and members of the community should be encouraged to play their part in making significant reductions in traffic movements through the town'

'Uttlesford DC Planning and Essex Highways should develop a plan for the Thaxted Road junction which takes advantage of any future development in the immediate vicinity of the junction'

'The local strategic partnership should be involved in the development of the plan'

'Children don't cycle to school because of the lack of cycle lanes, narrow roads, and the weight of traffic'

'Limited free parking on the periphery of the town to encourage walking bus schemes'

'Improved information on bus routes, better and more services to Audley End railway station to cut down on commuting to the station'

'Combined bus and rail tickets'

'Air quality assessments to accompany every planning application for significant numbers of new houses'

'Spot checks on HGV emissions and older cars and light vans'

'Higher car parking charges for highest emitting vehicles'

'Enforcement of the HGV ban on vehicles entering the town from the north'

'Improvements in HGV emissions standards and a ban on idling traffic'

Comments on Specific Proposals

Proposed Measures	Responses
School Travel Plans	<p>1 school responded that they had carried out a survey of travel needs and encourage walking, cycling and car sharing and provide a school bus service for almost a third of students. However there were concerns about children's safety when cycling to school. The need for yellow lines outside the school to ease congestion was also mentioned. A suggestion was made that a prize be offered for the best school travel plan.</p> <p>The provision of free facilities to drop pupils off and collect them at the Town's main car parks was suggested along with a 'walking bus' to take them to their school.</p> <p>Universal bus provision for school pupils was suggested along the lines of the 'yellow bus' system in the USA</p>
Business Travel Plans	Comments were received about the slow pace of implementing a staff travel scheme for UDC employees
Public Transport	The need for direct and frequent services to Audley End Station and Cambridge City Centre were mentioned and a general all round improvement in public transport. Better bus stop provisions at Audley End was also mentioned
Congestion Schemes	<p>There were a number of adverse comments on the plans to remove the traffic lights at the junction of High Street and George Street. These included a general scepticism that the proposals would work and a belief that congestion and air pollution would be displaced elsewhere. There were concerns about the ability of pedestrians to safely cross George St. There was also support for the scheme to be implemented on an experimental basis</p> <p>The proposals for the junction of Castle St and High St also attracted comments on the likely displacement of queuing traffic and associated problems with access to Castle Street and other side streets, poor air quality being dispersed to other areas and the need to increase local monitoring of air pollution at these new locations.</p> <p>The Radwinter Road and Thaxted Road proposals attracted universal support but Essex Highways have subsequently advised that this scheme was unlikely to go ahead due to excessive costs. The idea of a one way link road from Radwinter Road to Thaxted Road was suggested.</p>
Improved car park signage and concessionary rates for low emission cars	Positive comments were received in respect of these suggestions.
Movement of heavy goods vehicles	There was a comment acknowledging that HGVs were a major issue but there was no easy solution to west to east movement of lorries. A suggestion was made that spot checks should be carried out on emissions from HGVs and requirements to switch of engines when stationary.
Cycling	Safer cycling routes including to Little Walden, Audley End and Wimbish were suggested.