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Durham City Air Quality Action Plan

The response has been structured to match the questions given on the consultation web site, but in view of the length it was felt to be better to submit this as a single document.

Action 1

Replace the roundabouts at North Road, Gilesgate and Leazes Bowl with signalised junctions and coordinate traffic through a traffic management control system.

A co-ordinated traffic management control system could bring air quality improvements if it helped to smooth the traffic flow and reduced the amount vehicles have to stop and start when passing through Durham on the A690 corridor, since braking and accelerating increase fuel consumption and emissions markedly compared with driving smoothly. However, the effectiveness of this measure will be heavily dependent on the detail of the implementation, in particular the new designs for the junctions and how the system is planned to be operated.

The Trust is extremely concerned that the consultation document exhibits evidence of muddled thinking and lack of transparency about policy objectives on the Council's part which suggest that, far from being evidence-led, the proposed Action 1 is designed to support pre-determined proposals which would exacerbate, rather than mitigate, the problems that the Plan purports to address.

For example, designing traffic signal phasing to allow smooth journeys through the current air quality management zone may simply export the problems to adjoining roads where cars may end up queuing longer than at present. There is also the risk that the traffic management system might sufficiently improve travel times that more vehicles are attracted to use the roads in the peak periods, potentially negating any short-term improvement gained in air quality and increasing greenhouse gas emissions overall. The reality of this risk appears to be substantiated by the modelling assumption adopted by AECOM: this is that average speeds will be increased by 5 km per hour throughout the study area. Standard transport planning methodology is based on the recognition that a reduction in journey time will generate more traffic.

In addition, the early designs which have been released for the North Road, Leazes Bowl and Gilesgate junctions have all received criticism because of how they deal with cycling and walking. While air quality is an important issue on the A690 corridor through the city, to achieve significant reductions in carbon emissions in the transport sector there must be much more of a switch to cycling, walking and public transport. The North Road roundabout plans show pedestrians being excluded from certain routes, with multi-stage crossing of the main road delaying journeys. Cycling was provided for only by designating existing footways as shared-use. Sharing with bicycles will substantially worsen the pedestrian environment, while

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some cyclists are likely to continue to risk injury on the main roads: recent accidents have reminded us of how important it is to provide separation of cyclists and motor vehicles.

The Gilesgate roundabout plans at face value offer improvements to pedestrians, with signalised crossings being added, but again cyclists are expected to share the footways with people walking. If the A690 is not to remain a barrier to active travel modes then more care must be taken in the design of the junctions:

- pedestrians and cyclists should be able to negotiate the junctions in a single phase where possible, or by means of separate stages which are co-ordinated to be convenient. Having to stop and wait unduly makes walking and cycling unattractive, and in the case of cycling wastes energy.
- cyclists should be fully segregated from motor vehicles, and fully segregated from pedestrians as well, on well-designed smooth convenient routes of adequate width which have been designed without tight corners.

There is no escaping the fact that the North Road and Gilesgate roundabouts will form part of various key routes for people walking or cycling, just as much so as for the motorists whom the Council appears to be favouring in the scheme designs. It is essential to redesign these roundabouts to prioritise active travel modes in accordance with the aims of LTP3 and the NPPF. Slowing traffic speeds at junctions by tightening corner radii and reducing lanes can do just as much to smooth traffic flow, and has the advantage of improving safety for vulnerable road users and reducing delays crossing roads.

In terms of how the traffic management control system would be operated, once put in place, it is important to ensure that it is not used to increase peak hour capacity on the network, which is partly limited at present by the journey times people can achieve. By smoothing traffic flow there is the danger that non-essential journeys, currently made off-peak to avoid congestion, would be retimed and contribute additional traffic, thus negating any gains made. Reference has already been made to the fact that the model variable adopted by AECOM for the purpose of estimating the potential contribution of this action is stated in table 4 on page 19 to be: “remove queue sections and increase average speed by 5 km/hr throughout the study area”. While this correctly implies that if you can significantly reduce the time spent queuing it is possible to raise average speeds and yet also reduce the maximum speeds attained, such an outcome would inevitably be traffic generative unless also simultaneously accompanied by effective measures to stop any induced traffic growth.

We would support a mode of operation whereby the system is used to control and reduce the maximum speed of vehicles passing through the city, particularly the sections of route through Neville's Cross Bank, Crossgate Peth and Alexandra Terrace which are most heavily used by schoolchildren, students and other local residents. Lower speeds (either imposed as formal limits or applied through control of the traffic light phasing) would help to recivilise these streets and encourage active travel.

Paragraph 11.4.1 admits that the air quality benefits are not the key driver for installing the SCOOT system, and that there is much uncertainty about the magnitude of the air quality benefits that will be achieved. Considering the large amounts of money to be spent on SCOOT installation, including the remodelling of three roundabouts, we question why the Council is pressing ahead with a measure which seems to be in conflict with the sustainable transport aims of LTP3. The proposed roundabout designs could jeopardise the achievement of other elements of the Action Plan, such as the modal shift to cycling and the smarter choices actions which collectively are assessed as having a larger impact than the SCOOT system (see table 9, page 31).

We note that in the option scoring table (table 12, page 34) the SCOOT scheme was assessed as “free or negligible, or paid from allocated budgets”. This is a completely inappropriate approach to option analysis, since it has the effect of artificially enhanced the priority of this action, by comparison with more directly effective actions. .

We also have serious reservations about the townscape and environmental impacts of the loss or reduction in green space and mature planting envisaged in the Council’s present plans for these junctions, and remain totally opposed to the designs so far proposed for the North Road junction. This latter aspect is commented on more fully in the response to Question 4.

Action 2

Fit systems to exhausts on buses with diesel engines to reduce emissions from buses on routes within the air quality management area.

We fully support this action. Care needs to be taken, in dealing with operators of the buses, that the vehicles will not be diverted in the future onto other services outside the area unless replaced by buses with lower emissions.

Action 3:

Ensure where possible that buses that can be driven using electric power, as well as diesel fuel, are used on routes within the air quality management area.

We fully support this action. Some cities, such as Oxford, already have a high proportion of hybrid buses in the local fleets, and are now introducing buses which feature energy recovery by means of flywheels. As all new buses registered from January 2014 onwards have had to comply with the Euro VI emissions standards, we assume that this action is about prioritising the use of new buses or companies' existing electric or hybrid vehicles on routes passing through the air quality management area.

Vehicles which can maintain lighting and heating when stationary without having a diesel engine idling would be beneficial in reducing emissions.

We regret that the Cathedral bus service, which had been operating with electric vehicles, now seems to have reverted to diesel operated.

Action 4:

Ensure the city's park and ride buses are compliant with Euro VI emission standards.

We support this action but note that the last invitation to bid for the contract for providing the park and ride service, when issued in 2014, already stipulated that the fleet should comply with Euro VI emissions standards, and that the contract was expected to be let for five years. This action should therefore have been completed.

We would support the installation of infrastructure to allow charging of electric buses on any routes where a significant proportion of the journey passes through the AQMA.

Action 5:

Encourage cycling in preference to the use of the car, by developing cycle ways across Durham City that link into national and county cycle routes.

We strongly support this proposed action, including the ambitious but achievable proposal of a 7–10% modal shift. The plan recognises that at present the lack of suitable infrastructure is the most significant factor that needs addressing if cycling is to achieve the sort of modal share that is common in other northern European countries. While linking into national and county cycle routes is useful, the maximum modal shift will be obtained by concentrating on journeys around the city centre, providing coherent continuous routes. The unsuitability of city centre routes for cycling is a significant factor in the poor modal share of cycling at present.

The Council must develop a detailed plan for a dense network of cycle routes, ensuring that safe and convenient routes pass close to significant destinations such as schools, major places of employment, and shopping areas. Just as the Council aims to provide all housing in the urban area with bus services, so should all residents of the city have cycle paths running not far from their homes.

Attention must be given to the quality of the routes, and in general routes should be designed to avoid conflict with pedestrians, through clear segregation and good design practice such as a consistent coloured surface for cycleways, kerbs to separate cyclists from motor vehicles and from pedestrians, and priority at side roads and on crossings.

The Council has not yet tackled the difficult questions of how to provide an adequate cycle network across the city centre. In recent years improvements to cycle routes have mainly been between the centre and outlying areas or to neighbouring settlements. If the network gets people part way to the destination but fails to assist them through the heavily trafficked areas of the city centre to their destinations, the investment is unlikely to result in many more people cycling.

The pace of change has been disappointingly slow. The Council's own cycling strategy for 2012–2015 promised an audit of the twelve main towns in the county, including Durham city, but at the time of writing only the audit for one town has been completed. Design work for new networks will surely be more time-consuming than the audit work. The Council will have to allocate more staff resource to this work, set ambitious timescales and meet them.

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The AQAP considers this to be a long term measure (table 16, page 41), but it is one which is long overdue. There is a danger that by regarding it as long term the Council will fail to give it the high priority that it deserves. We note that following campaigns in the mid 1970s the Netherlands had already achieved significant improvements in infrastructure within six years. We are also concerned that the monitoring measure proposed for this action is the length of new cycle routes constructed. This is a simplistic measure because it does not take account of whether routes go anywhere useful, nor whether they have significant gaps, for example at junctions.

Funding a comprehensive network will be a challenge, and we would like to see the Council prioritising investment in cycling over general road improvement schemes, recognising that for the past forty years there has been insufficient investment in cycling infrastructure and a lack of appreciation of the many benefits cycling brings to a city. There is an urgent need to strengthen local planning policies in order to derive benefit for the cycle network via Section 106 payments and other sources of planning gain. The Council must also work with NECA to ensure that regional funding also prioritises sustainable transport rather than being spent on major road schemes.

It is notable that this action, together with action 6, are the only two actions which can be developed further over the years and potentially yield benefits in excess of the estimates provided in the AQAP.

Action 6:

Promote alternative forms of transport with businesses in the city, to encourage large employers to implement staff car sharing and pooling and the use of alternative forms of travel.

While this aim is laudable, experience of the implementation of travel plans at major employers suggests that there is a limited impact on behaviour until the supply of car parking becomes constrained or charges for workplace parking are introduced. Major employers with parking sites across the city should be encouraged to differentiate their parking permits so that staff are permitted to park only in the car parks closest to their homes. This would reduce traffic across the centre of the city and promote active travel modes.

There will need to be an improvement in bus routes to serve major employers better if this action is to be successful. For example, the Park and Ride services from Belmont and Sniperley are unattractive to staff working at the University's main campus because they would need to catch a further bus or take a twenty minute walk to complete the journey.

An agreement for revenue sharing between the bus companies to allow users to complete their journey on a second bus would help to counter the inconvenience of bus travel when compared with the car. Park and Ride facilities close too early: this has been identified as an issue by the consultants JMP and was confirmed by comments from representatives of various employers at the presentation on the afternoon of Monday 30 November.

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The Council should endeavour to monitor the success of this action by obtaining the results of staff travel surveys wherever possible. Travel plans for new developments should require regular travel surveys, the results of which should be made available to the public.

Action 7:

Ensure a full air quality impact assessment is carried out for any future developments, to identify opportunities to reduce any negative impacts and improve air quality wherever possible.

The wording of the above action in the action plan summary leaflet disguises the fact that the main subject of the assessment is intended to be the proposed Western Relief Road and other measures within the County Plan, as is clear from page 41 of the full AQAP.

Even if such assessment showed a positive localised impact on air quality, the overall impact on carbon emissions of the Western Relief Road is certain to be detrimental, and this should be uppermost in our minds.

Action 8:

Establish the Air Quality and Planning Guidance Note as a Supplementary Planning Document (SPD), setting out the requirements on developers when proposing new development within the city and its surrounding area.

We have not had sight of the proposed document, but we support this action as an SPD would be necessary to introduce the air quality issues as a material planning requirement.

However, far more valuable as an action would be a commitment to requiring adequate transport assessments for developments. These are provided in many cases during the planning process at present, but the vast majority of assessments are desk studies which paint an overly positive view of the sustainability of the proposed development. We see no reason why an air quality impact assessment would be any better in identifying weaknesses and opportunities. The Council's own internal consultees rarely pick up on the flaws in the active travel aspects of transport assessments which are in many cases readily apparent to anyone with a knowledge of the area and of the needs for walking and cycling infrastructure. Comment is usually limited to movements within a site and the immediate connections to the road network, rather than considering the wider travel needs. The summary reports written by planning officers very rarely cite transport issues among the grounds for rejecting a scheme, and contributions via Section 106 agreements and other mechanisms have not recently funded any significant sustainable transport infrastructure.

We suggest that more stringent assessment of transport requirements should be put in place in the planning process, with officers being prepared to indicate that the studies provided are unacceptable before determination of the applications. This would be more valuable than requiring a further desk-based consultant's report on air quality.

Planning policies for the city should be strengthened considerably so that new development should be assessed for the contribution it can make to the reinforcement of the sustainable

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transport system. If a development cannot make a positive contribution to the sustainability of transport in the city, then it is clearly the wrong sort of development or in the wrong place.

Action 9:

Develop and establish a Low Emissions Strategy.

Until this strategy is drafted it is hard to comment on how effective this would be. We agree that integrating the various strategic policies covering air quality and carbon reduction could assist in addressing air quality issues.

Action 10:

Raise awareness of air quality by undertaking a programme of campaigns.

This could include encouraging drivers to turn off their engines when stopped for more than ten seconds to save fuel and emissions. There should also be publicity about the health effects of poor air quality to build support for actions which are currently deemed to be politically unacceptable, but which may be essential.

Action 11:

Direct traffic to available parking through variable message signs and direction signing system.

While we can see that the aim of this action would be to reduce the emissions produced in queuing for a parking space, if successful this action could result in a modal shift away from sustainable modes and an increase in carbon emissions. It would therefore be important to balance this action with a reduction in car parking availability and improvements in sustainable transport alternatives.

Action 12:

Provide travel and driver information using the traffic management control system and explore the use of new technology to provide information on air quality.

Information should include promotion of sustainable transport alternatives to encourage drivers to use a bike or take the bus if air quality thresholds are likely to be exceeded. The congestion information could also indicate the likely travel times by bike as these can be shorter than car travel times for short journeys at peak times.

The Council web site should provide real-time data from all continuous analysers and provide easy ways for citizens to access current and historic information on air quality. Plotting the information on maps can help people to understand whether their homes and schools and workplaces are affected.

Question 3:

Are there any other actions you think need to be considered for inclusion in the action plan?

Regarding actions 2 to 4 it would seem appropriate that the Council hasten, as far as possible, the adoption of low emissions vehicles by taxi operators as well as bus operators. Taxi licences

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should be made conditional on vehicles being low emission, zero emission or hybrid within three years. Measures also need to be taken to reduce the oversupply of taxis in the city, which causes extra avoidable air pollution and reduces the amenity of public spaces such as North Road. Taxis should be required to turn off their engines when waiting in taxi ranks.

There is no indication that continuous automatic monitoring is to be extended to any additional sites, nor is any extension of the network of diffusion tubes mentioned. If the Council is serious about this as a health hazard, there should be a commitment to regular monitoring and action as a consequence, e.g. closing roads near schools, hospitals and shopping areas whilst levels are high. Among other means the County Council could use its information display outside County Hall to raise the alarm if air quality falls below safe levels in any part of the City rather than awaiting new forms of technology to carry the message.

The plan should seek to reduce car parking provision where this is being used for journeys which could be done by sustainable means. The controlled parking zones (CPZ) of Durham city generally allow use by non-residents on payment of parking charges at the neighbouring machines. Greater use of residents' parking schemes (RPS) would help to cut down on unnecessary car travel. Charges should be reviewed to discourage long-stay parking. Promotions which send completely the wrong message, such as free parking in the run-up to Christmas should be rethought: a cheap bus fare promotion for afternoon/evening shopping would be a better and more equitable alternative. The plan should seek to reduce private car use in Durham by students who reside near the centre, and school travel plans should be put in place to reduce car travel. Residents of Durham City already know how drastically traffic levels and local congestion level ease during the University vacations and even further in the school holidays.

A congestion charge on the Milburngate Bridge targeting the most polluting vehicles should be considered, or a low emission zone. This could be confined to peak commuting times to avoid harming the city centre economy. We understand that this has been considered in the past and that among the reasons cited for rejection was that it would hit families transporting children to school hardest as they would be least likely be able to make alternative arrangements. To counter this argument we would observe that families with children would be among those to benefit most from improvements in air quality as pollutants affect lung development and can have lifelong effects on children. Active travel to school will also be helpful in tackling childhood obesity. If the cost to families was really the main objection, there are ways to tackle the problem: families could be permitted to apply for an exemption, and schools could staff playgrounds earlier at the start of the school day to spread the drop-off times and thereby make it easier for parents to use other forms of transport.

We question why there is no action relating to further development of the pedestrian network of the city. Good quality walking routes, while useful in their own right, are also required for the initial and final stages of most journeys, whether by public transport or car.

The Council should draw up a city-wide master plan for enhanced walking and cycling routes, with good through routes away from main roads as well as decent widths of footways and cycle ways alongside roads. A Supplementary Planning Document could then require

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developers to contribute to the realisation of this network by requiring consideration of sustainable transport routes to key destinations, such as schools, colleges, food shops, etc.

Durham already benefits from a good network of footpaths, but these need to be maintained to a better standard, with leaf clearance and drainage being a higher priority. Some footways would benefit from upgrading, with better surfaces and clearance of vegetation. Some off-road routes (for example Clay Lane, Blind Lane) should be considered for installation of lighting. When new developments are planned, council officers should intervene as early as possible to secure through walking and cycling routes to adjoining areas. Recent examples where this has not been achieved include the infill housing development to the south of Potters Bank, without any route through to neighbouring Dickens Wynd or the Business School, and the recent application for housing on the site of the former police headquarters in Aykley Heads.

Question 4:

Do you have any other comments on the air quality action plan?

While actions 5 and 6 are important for air quality, they must also be seen as an important strand of a sustainable transport strategy which can make a major contribution to meeting climate change commitments and improving health and the local economy. Such a strategy should also include bus priority measures, investment in real-time information at bus stops, and control and removal of car parking, particularly on those roads where the space would be better devoted to sustainable modes through bus lanes, cycle lanes or footway widening. A sustainable transport strategy should have a clear hierarchy in terms of action and investments on transport. Only if current priorities are reversed will it be possible to progress towards a more liveable city. That hierarchy, of course, should be:

- Walking
- Cycling
- Public transport
- Cars and commercial vehicles

This should apply not only to big investment decisions but also to minor works to improve motor traffic flows, which often are implemented with scant regard for other road users.

As LTP3 recognises, land use planning is an essential tool to encourage uptake of sustainable transport. Close to urban centres, where public transport is good and walking distances to facilities are shorter, housing developments should be built at a higher density, and without insisting on a minimum level of car parking to be provided. Larger developments further from the urban centre, where there is more risk of car dependency, can be designed to encourage sustainable travel by measures such as locating parking away from the housing, in discreetly-designed multi-storey blocks, allowing the spaces outside homes to be car-free to the benefit of all. The walking and cycling distance to shops and schools, and the safety and convenience of those routes, must be the main factor in determining locations suitable for development.

The mode of recent developments in the area near Durham City has actually tended to encourage further use of private vehicles to access facilities that used to be more centrally available. Durham City has been weakened as a retail centre, for the stress has been on out-of-

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centre retail and for plans for housing estates built near them in the green belt. In addition, the Council's policy of shifting its own key customer-facing services to out of centre locations (for example, the parking shop, the registration of birth, deaths and marriages, and most recently the social work services moved from Hopper House) is completely contrary to NPPF and the Council's own policies in LTP3 in both undermining the city centre and making such facilities more difficult for non-car users to access, whether they are city residents or those from further away who travel to Durham by bus and who are now forced to make a second journey to reach these Council facilities.

Current car parking regimes also reflect this regressive out of centre bias, with charges for those in the centre while outlying retail and business centres are free. If, as is now proposed, County Hall is to be moved away from its current location, consideration should be given to its relocation at a site that minimises commuting by employees, especially by car. Current research by JMP suggests that such a location is more likely to be to the east than west of the River Wear, as more journeys to work are in an east-west direction, putting some pressure on the Milburngate river crossing, at least at peak hour times.

Overall the action plan is notably lacking in targets. Many proposals remain rather sketchy and vaguely aspirational. There should be clear targets for reduction in emissions with dates and means of measurement.

In terms of natural justice the polluter should pay. None of the measures require a financial contribution from those causing the emissions, except perhaps the bus companies for actions 2 to 4. Notably there are no measures proposed which could increase the cost to users of private diesel cars. The report mentions a number of possibilities but dismisses each one.

On page 21, section 6.3.1 discusses charging more for parking diesel cars, in order to encourage users to switch to cleaner vehicles. This idea is dismissed with the comment that the council controls only a fraction of the supply of parking spaces in car parks. It disregards the fact that there is a considerable quantity of on-street parking which is under the council's control. It also ignores the examples given of Edinburgh, York and the London Borough of Richmond, all of which differentiate by vehicle type in the charges for residents' parking permits. These ideas should be pursued: they would be equitable, and send a clear message that car owners have a responsibility to consider the effects of their choice of transport on their fellow citizens. Equally, although there are several major car parks outwith the Council's control, this has not ruled out the proposal for variable message signs directing drivers to available parking (Action 11) which could only be implemented effectively by arrangement with the private car park owners. There would therefore be scope for negotiating differential charges as a condition of inclusion in the signage scheme.

The next section, 6.3.2, dismisses the idea of workplace parking levies, firstly with the comment that the city centre only has 250 private spaces. The large car parks owned by the County Council and the University are described as being "on the outskirts of the city". To anyone not knowing Durham this might seem a valid argument, however it is obvious that these car parks are within easy walking distance of the city centre and, moreover, that many of the vehicles parking at these locations will have driven through the AQMA. Finally the

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simplistic comment is made that “the pollution problems in Durham City are as the result of external journeys using the A690 for the purpose for which it was constructed, as a through road”. This is simply wrong: the congestion is contributed to by many entirely local journeys, as is confirmed in paragraph 3.1 (page 9) where it is stated that “up to two thirds of the traffic in Durham City centre simply passes straight through the City”, i.e., at least one third does not pass straight through and could be influenced by a levy. Moreover, the reason given in 6.3.2 for not considering workplace parking levies would apply equally to action 5 (encouraging cycling) and action 6 (promoting smarter choices via major employers).

Further muddled reasoning can be found in section 8.3 (page 36) where the option of maximising use of the Park & Ride is ruled out, as it would be “dependent on financial and policy drivers to discourage use of the city centre car parking in favour of the park and ride facilities, such as workplace parking levy” – which was elsewhere ruled out because it would not have much effect on traffic levels!

Careful reading of the argument leaves one with a strong impression that an effort has been made to find reasons to reject any action which might be unpopular with motorists. We are left with an action plan which risks being ineffective.

The Council should no longer be ruling out in advance traffic control measures such as further congestion charging, the reservation of road lanes for exclusive use of vehicles with more than one user, and work-place parking levies. Current claims from senior members of the Council that such measures would be unacceptable as deterring business are being made without fully studied evidence and should not in any case override issues of life and death such as air-quality. The recent presentation on sustainable transport by JMP pointed out how far cities with provision for pedestrians and cyclists, with adequate public transport and a less car dominated environment, are conducive to economically as well as physically healthy centres. However, recent proposals for so-called “relief roads” around Durham are obviously retrograde as measures to reduce emissions, since they would create yet more traffic, with pollution merely spread over wide area and newly focused at other, also congested junctions.

Given the growing awareness of the role of motor traffic in poor air quality, and the high-profile cases of cheating of emissions tests by car manufacturers, the Council should seize the political initiative and put in place a much stronger plan linked to a major sustainable transport strategy which delivers significant improvements on air quality and climate change commitments within a decade, with frequent reviews of progress to keep it on track.

Finally, as noted in our response on Action 1, we remain completely opposed to the Council’s current proposal to remove the landscaped North Road roundabout and replace it with a signalised junction controlling a greater expanse of tarmac. The value of this green punctuation in this key entry to the city is demonstrated by the fact that the Council itself uses it as a feature in its Christmas lighting and for floral displays, but more importantly its positioning within the framework created by the listed railway viaduct significantly enhances this part of the Conservation Area and provides a strong setting for the views of the World Heritage Site. In townscape terms, it was perhaps the one worthwhile addition bequeathed by the construction of the inner relief road half a century ago.