



Thorn House  
5 Rose Street  
Edinburgh EH2 2PR

7<sup>th</sup> August 2015

**Friends of the Earth Scotland Objection to Planning Application  
15/02898/FUL | Demolition of existing shopping parade and erection of  
food retail development including ancillary cafe at ground floor level,  
parking, infrastructure and landscaping. | 181,183,185,187,189,191,193-  
195 St John's Road Edinburgh EH12 7SL**

## **Summary**

**The development, if allowed, would have unacceptable impacts on traffic congestion, air pollution and the health of local residents and visitors. This damage far outweighs any possible benefit from the store, and cannot be mitigated through planning conditions. The Council is bound by its statutory duties on Local Air Quality Management to refuse planning permission.**

The proposed site for development is within an Air Quality Management Area which is known for having the poorest recorded air quality in Edinburgh due to high volumes of road traffic.

Air pollution is Edinburgh's biggest environmental health threat, and has a damaging impact on health similar to that of passive smoking. It can trigger asthma attacks, strokes, heart attacks, shortens life expectancy, and according to Public Health England statistics is responsible for at least 200 early deaths every year in Edinburgh.<sup>1</sup> Children are especially vulnerable to the impacts of air pollution and regular exposure can lead to their lungs not

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<sup>1</sup> G Cesaroni et al, 'Long term exposure to ambient air pollution and incidence of acute coronary events: prospective cohort study and meta-analysis in 11 European cohorts from the ESCAPE Project' BMJ 2014;348:f7412; Public Health England, 'Estimating Local Mortality Burdens associated with Particulate Air Pollution' (April 2014), page 20

developing to full capacity.<sup>2</sup> Exposure to air pollution has also been linked with mothers giving birth to babies with reduced birth-weights.<sup>3</sup>

To protect public health, there are two parallel strands of legislation which provide air quality thresholds: European Law and the Local Air Quality Management system. The thresholds and deadlines for their achievements are detailed in Table 1.

*Table 1: Air quality legal limits and regulatory standards*

Pollutant	Air Quality Objective - Concentration	Measured as	Scottish Regulatory Standard - Deadline to be achieved by	European legal limit – Deadline to be achieved by
Nitrogen Dioxide short term standard	200 µg m <sup>-3</sup> not to be exceeded more than 18 times a year	1-hour mean	31 December 2005	1 January 2010
Nitrogen Dioxide annual standard	40 µg m <sup>-3</sup>	Annual mean	31 December 2005	1 January 2010 (extended to 1 January 2015 by the European Commission)

Under the European Ambient Air Quality Directive<sup>4</sup>, the Scottish government was required to have achieved compliance with European legal limits for hourly and annual NO<sub>2</sub> concentrations in all parts of the country by 1 January 2010. It received a 5 year extension for the achievement of annual legal limit in Edinburgh, but this extended deadline has now passed and the Scottish Government continues to break European law in several areas including on St John’s Road, which has the second worst NO<sub>2</sub> air pollution reading of all the automatic monitoring stations across Scotland. The Supreme Court issued a legal judgment this April requiring the UK to produce a new Air Quality Plan by the end of this year, due to ongoing illegal levels across the UK, which the Scottish Government will need to feed into.<sup>5</sup> If the Scottish Government does not achieve compliance with European legal limits in all parts of Scotland “as soon as possible”<sup>6</sup> including on St John’s Rd, the Commission may revive legal proceedings that it started against the United Kingdom in February 2014 for non-compliance which could eventually result in hefty fines being imposed against the UK and Scottish Governments.<sup>7</sup>

<sup>2</sup> World Health Organisation, “Children’s Environmental Health: Air Pollution” <http://www.who.int/ceh/risks/cehair/en/>

<sup>3</sup> M Pedersen et al, ‘Ambient air pollution and low birthweight: a European cohort study (ESCAPE)’ *The Lancet*, Volume 1, No. 9, p695–704, November 2013

<sup>4</sup> Directive 2008/50 Ambient Air Quality Directive

<sup>5</sup> *ClientEarth v UK* [2015] UKSC 28

<sup>6</sup> Article 23, Directive 2008/50

<sup>7</sup> European Commission Press Release, ‘Environment: Commission takes action against UK for persistent air pollution problems’ (20 February 2014)

Under the Local Air Quality Management System, sections 83 and 84 of the Environment Act 1995 require local authorities to regularly review and assess air quality in their areas, and to determine whether or not statutory air quality objectives are likely to be achieved. Where standards are breached, the local authority must declare an Air Quality Management Area and must prepare an Air Quality Action Plan in pursuit of the achievement of air quality standards in the designated area.

The St John's Road Air Quality Management Area was declared at the end of 2006 due to breaches of the statutory objective for annual concentrations of Nitrogen Dioxide. In 2009 the AQMA was extended due to breaches of the hourly standard. The City of Edinburgh Council's Air Quality Action Plan was produced in 2008 with the key objective of improving air quality in Edinburgh. It described the problem on St John's Road as follows:

"St John's Road is a main focus with a large number of daily exceedences. This problem relates to the absolute volume of traffic present, the local 'canyon' townscape and the proximity of residential properties to the pollution source i.e. traffic."<sup>8</sup>

The Air Quality Action Plan has focused on trying to tackle air pollution at St John's Rd through managing bus emissions and through trying to ease congestion in the area through the implementation of smart traffic light signalling known as SCOOT.<sup>9</sup>

The Air Quality Action Plan is not designed to inhibit development. However, the planning system plays a key role in protecting public health by preventing harmful development which cannot be made more acceptable through conditions. At the heart of the Local Air Quality Management system is the objective to prevent the public from being exposed to any pollutant in excess of the legal objectives.

Unfortunately, results from the automatic monitoring station at St John's Road show that air pollution levels at St John's Road continue to be well above the legal threshold, and improvements observed from 2007 – 2013 appear to have since deteriorated. These are illustrated in Table 2 and Figure 1 below.

This monitoring data shows that annual concentrations at St John's Road have exceeded the legal standard by around 50% for at least the last 4 years and continued to do so in the first quarter of 2015. They also show that there is a continuing failure to meet the short term 1-hour legal standard, an issue not addressed at all by the developer's Air Quality Assessment.

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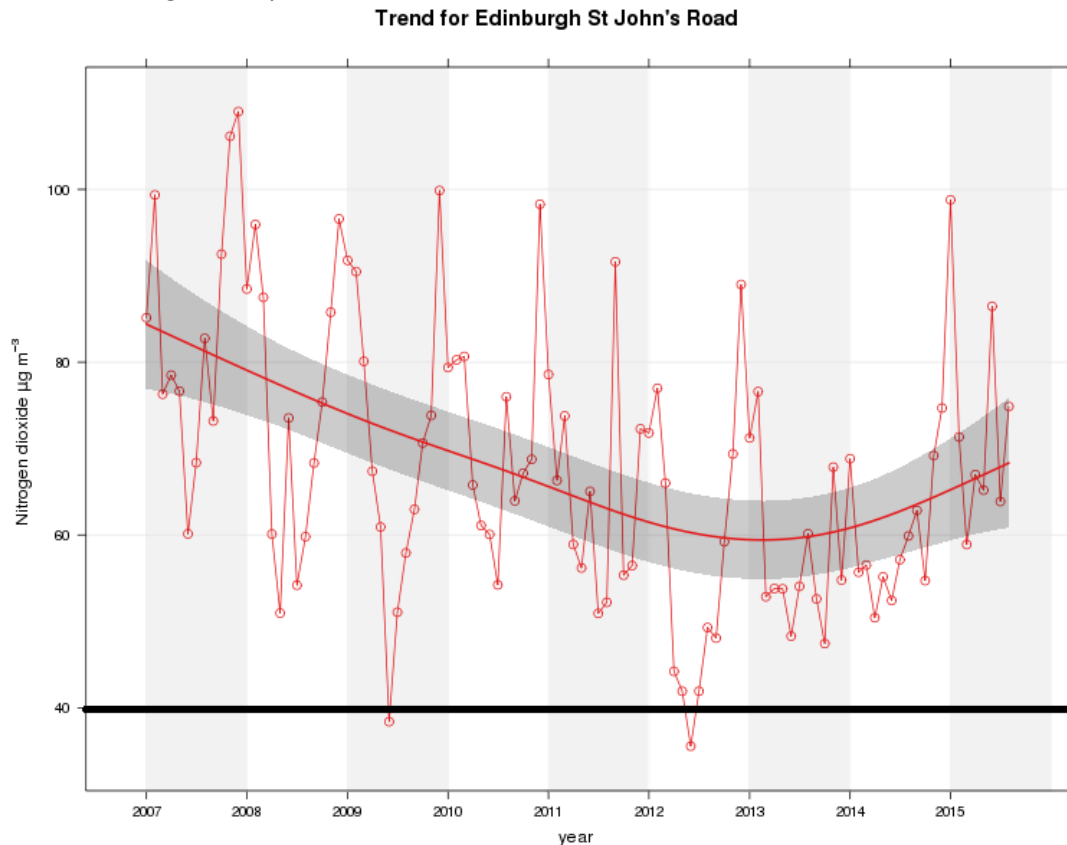
<sup>8</sup> City of Edinburgh Council, 'Air Quality Action Plan' (2008), page 28

<sup>9</sup> City of Edinburgh Council, 'Air Quality Progress Report,' (2011), pages 103-109, 116

Table 2: St John's Rd Automatic Monitoring Station data<sup>10</sup>

	2011	2012	2013	2014	2015 (January- March figures only) <sup>11</sup>
Number of exceedences of Nitrogen Dioxide short term standard (maximum permissible number of exceedences 18)	52	62	8	1	29
Nitrogen Dioxide annual average (maximum permissible concentration: 40 microgrammes per cubic metre)	65	58	57	59	72

Figure 1: Nitrogen Dioxide Pollution Trend at St John's Road (black line indicates legal limit)



<sup>10</sup> In an email to Friends of the Earth Scotland dated 4<sup>th</sup> August, Ricardo AEA, the consultancy responsible for verifying and ratifying the data from the Scottish Government's Air Quality Website confirmed the data as officially correct. We sought clarification because the data needed to be verified and corrected in late 2014 and early 2015 due to a technical fault.

<sup>11</sup> Figures beyond March have not been included as only the January – March figures have been verified, corrected and ratified by Ricardo AEA

Against the backdrop of existing poor and deteriorating air quality in the area, Edinburgh City Council's Local Development Plan Policy ENV 18 states,

“Planning permission will only be granted for development where:  
a) there will be no significant adverse effects for health, the environment and amenity and either  
b) there will be no significant adverse effects on air, water or soil quality  
c) appropriate mitigation to minimise any adverse effects can be provided.

The LDP goes on to state at paragraph 4.35,

“The planning system has a role to play in the protection of air quality, by ensuring that development does not adversely affect air quality in any Air Quality Management Area that has been declared.”

The fact that this sentence does not state “...ensuring that the development does not *significantly* adversely affect...” distinguishes it from the preceding paragraph and suggests that when it comes to development proposals in AQMAs, *any* adverse effect from development, however significant, is required to be prevented.

Whatever the interpretation of paragraph 4.35 is, we believe the impacts of this store on traffic congestion in the area and on air pollution are much worse than the Transport Assessment and Air Quality Assessment have claimed. This is because we have read Realis' planning documents and believe there are numerous flaws, omissions, and optimistic assumptions made around traffic flows and the road network. We set out the reasons why we have reached this conclusion in the following sections of this objection.

Therefore, the only safe conclusion is that this development would have an unacceptable impact on traffic congestion and air pollution which render it inappropriate for the location.

The resulting certain outcome of increased harm to the health of residents, potential visitors and particularly to children having to walk along St John's Rd and Manse Rd to Corstorphine Primary School far outweighs any benefits that the proposal would bring, including the mention of new jobs by the developer.

The development could not be made acceptable through conditions, due to the unmitigable consequences of making Manse Rd two-way (discussed in our 3<sup>rd</sup> objection below) and due to the explicit core aim of the development to encouraging vehicle visits to the area, which runs against the Council's Air Quality Action Plan and modal share targets (discussed in our 4<sup>th</sup> objection).

We are not opposed to the site being redeveloped and feel there are valid concerns over the current building. But given the highly sensitive location, any proposal for redevelopment needs to be appropriate.

A suitable proposal would need to:

- have minimal parking (i.e. no more than the current 15 spaces of a retail development or possibly slightly more if it were a housing development).
- keep Manse Rd one-way
- create a much stronger benefit to the local community, e.g. affordable housing, or a row of independent shops.
- preferably remain one-storey due to the canyoning effect of high buildings on the road
- retain the protected trees
- not impede pedestrians

Taking all of this into consideration and weighing the dangers of the proposal versus the benefits, to allow the development would:

- Undermine the Council's Air Quality Action Plan's efforts to tackle air pollution in the area
- Run against the Council's Local Development Plan Policy ENV18
- Run against the Council's statutory obligation to work towards the achievement of air quality objectives in the area under sections 83 & 84 of the Environment Act 1995
- Undermine the Scottish Government's work towards its legal obligation to meet air quality limits "as soon as possible", for which it was held up in court earlier this year.

## Detailed comments

### Traffic Generation

**(1) The proposal will generate over 11% more traffic into the area, thereby worsening congestion and air pollution in a designated Air Quality Management Area. Furthermore, the Traffic Assessment contains contradictory and incomplete estimates as to how many vehicle trips to the store are anticipated, leading to uncertainty and casting doubt over the Junction Analysis and Air Quality Assessment.**

There is already too much traffic congestion in the area, which is why the area was declared an Air Quality Management Area at the end of 2006.

The Traffic Assessment, produced by Transport Planning, predicts that during weekdays, 50% of visits made by vehicle to the supermarket will be "new" trips as opposed to "pass by" trips, and on Saturday peak hour, 70% of visits made by vehicle will be "new" visits as opposed to "pass by" trips.<sup>12</sup> So it is clear that the development will increase the volume of motorised traffic in the area and encourage new trips into the heart of the Air Quality Management Area.

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<sup>12</sup> Traffic Assessment, Paragraph 7.18 & Appendix D, Diagrams 5a, 6a, 7a, 5b, 6b, 7b, 5c, 6c & 7c

However, Transport Planning has provided two contradictory and incomplete analyses over how many vehicle visits there will be, casting doubt over the overall traffic impact of the proposal.

Transport Planning has calculated vehicle trip visits to the store during peak hours (at weekday a.m. and p.m. peak and Saturday late morning peak) based on a survey they conducted of the Morningside Waitrose. This has formed the basis of their Junction Analysis and is detailed in at Table 7.8 of the Traffic Assessment. At the same time, they have provided an overall estimate of daily visits to the store on weekdays and Saturdays based on the TRICS database, detailed in Appendix F.

The omissions and flaws are as follows:

- The two sets of numbers do not match up as they are based on different stores (see also next section).
- Nowhere in the Traffic Assessment are the total numbers of expected Sunday or overall weekly vehicle visits calculated and displayed.
- It is not clear what numbers REC have based their Air Quality Assessment on as the vehicle numbers input for the Air Quality Assessment, (detailed in Appendix II of the Air Quality Assessment) do not match up either with the numbers in Appendix D or Appendix F of the Transport Assessment.

This creates an unacceptable muddle and uncertainty over how many vehicle visits to the store are expected and poses serious questions over the overall credibility of the Transport Assessment and Air Quality Assessment.

Given the highly sensitive location of the proposal, this lack of credibility in and itself should influence the judgement on the overall significance of the development on air quality: the Institute of Air Quality Management's Guidance on Land-Use Planning & Development Control (May 2015) states,

“Any judgement on the overall significance of effect of a development will need to take into account ...the influence and validity of any assumptions adopted when undertaking the prediction of impacts.” (paragraph 7.7, p 26).

Setting this issue data to one side, we proceed with our objection using the sometimes conflicting data as best we can.

Transport Planning used information obtained through TRICS to estimate the number of vehicle visits to the store per weekday and Saturday, with the result that taking the weekday, 90 vehicles per day per 100sqm of floor area are expected (detailed in Appendix F of the Traffic Assessment). This is equivalent to a weekday total trip count of **3013 vehicles** (no information has been provided about Sundays). In an email from Alex Sneddon of Transport Planning to us dated 28 July 2015, this number was confirmed as representing the number of anticipated daily trips to the store on weekdays.

Assuming a scenario where roughly 80% of the incoming traffic would arrive from St John's Road and 100% of the outgoing traffic would leave to St John's Road<sup>13</sup>, 3013 vehicle visits per day would constitute around an 11% increase on traffic levels on St John's Road which are around 24000 vehicle per day at present. This would cause a strain on the already over-capacity network which will not be able to be mitigated. This strain on the network will be worsened by additional queuing time at the Manse Rd junction due to it becoming 3-way.

The developer has made much of the fact that upgrading all the junction links to SCOOT would mitigate the additional traffic. But, firstly, the Council has for a long time intended to upgrade to SCOOT on most of the St John's Road junctions anyway as part of the plans to help tackle air pollution, and this work is well overdue according to Edinburgh Council's Air Quality Progress Report 2014.<sup>14</sup> And secondly, SCOOT in and of itself is not considered by the Council to be sufficient to solve the St John's Rd Air pollution problem because of the overarching issue of over-congestion on the network – and that again is *without* the thousands of additional vehicle visits per weekday. In a letter to ourselves dated February 2015, Robert Mansell, Professional Officer for Traffic Systems stated,

“The traffic entering St John's Road can exceed capacity during the peak periods, thus although the Council will continue to manage the traffic as best feasible, the likelihood of traffic queues and delays will remain as a result of overall traffic volumes in relation to the limited capacity of the road network.”<sup>15</sup>

This confirms that there is a real and ongoing problem around congestion on the road network and that upgrading all the traffic junctions to SCOOT will not be able to fully solve it.

The developer's reliance on SCOOT to fix the problem is therefore a red herring.

**(2) The Traffic Assessment's vehicle trip assessment has underestimated the number of vehicles anticipated to come to the store. This means that the Junction Analysis (and possibly the Air Quality Assessment) have used incorrect data and therefore underestimate the impacts of the development**

Transport Planning has used the Morningside Waitrose store as the basis to project how many vehicle trips will be made to the store during weekday and Saturday peaks. Paragraph 7.16 of the Traffic Assessment states “It is

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<sup>13</sup> We have assumed these ratios based on the ratios Transport Planning has put into its Traffic Flow Analysis in Appendix D

<sup>14</sup> The Council's Air Quality Progress Report 2014 stated “It was anticipated that SCOOT at St Johns Road AQMA would be complete and commissioned by 2013... However, cabling works are still incomplete at Manse Road and due to recent footway improvements at Clermiston Road there is a potential for further loop damage. This will need to be reviewed once the work has been completed. SCOOT is expected to be fully operational by end of 2014.” (p 116)

<sup>15</sup> The letter was written by Mr Mansell in response to an inquiry we had made about the SCOOT operating system and can be viewed at <https://dl.dropboxusercontent.com/u/68796710/SR821926OUT-13feb15.pdf>



considered that the use of the surveyed Morningside trip rates is the most appropriate one to offer a robust traffic assessment.”

Transport Planning have not offered any justification for this choice, and have ignored the results from the TRICS database for Land Use which gave them very different trip rates looking at similar stores around the country.

The Morningside ratios are *half* those of the TRICS ratios during weekday a.m. peaks and around a third lower during weekend p.m. peaks (Table 7.8 of the Traffic Assessment). On Saturday, they are also substantially lower than the TRICs models. So the choice of Morningside store is not at all a worst-case scenario choice; it's far more optimistic than the TRIC ratios.

The Morningside Waitrose is not a realistic choice. The characteristics and travel choices between the Morningside store and this store differ greatly: the Morningside store is located in a much more densely populated area with people living nearby in tenement flats, meaning it is much easier for people to nip out to the shop by foot.

Conversely, the proposed site for development is in a much more spread out area with people living in bungalows and houses (The population density of Morningside/Meadows is 48.1 people per hectare, compared with a population density of 30.1 people per hectare in Corstorphine/Murrayfield.)<sup>16</sup>

American research has shown that reductions of distances between homes and grocery stores leads to less driving for grocery shopping.<sup>17</sup>

We can only assume that the Morningside Store was selected because it yielded relatively low vehicle trip rates compared with the TRICS ratios.

These incorrect vehicle trip rates were used for the Junction Analysis and possibly for the Air Quality Assessment. Therefore those analyses also underestimate the effect of the development on air quality and traffic levels.

## **Manse Road changes**

**(3) Making Manse Road two-way will create unacceptable levels of congestion at the Manse Road junction. Furthermore, we believe that the Junction Analysis has underestimated how much extra traffic there will be at the St John's Road/Manse Road junction.**

Realis proposes to make Manse Road two-way at the north part of the road until the entrance to the store car park. This will create additional waiting time and create extra congestion on the road network which cannot possibly be mitigated.

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<sup>16</sup> City of Edinburgh Council, Ward 6 and Ward 10 Area Profiles (2006)

<sup>17</sup> Jiao et al "Grocery Shopping: How Individuals and Built Environments Influence Choice of Travel Mode", Transp Res Rec. 2011; 2230: 85–95.

At present, the traffic lights are on a two-part cycle, meaning that in the first stage, traffic comes north out of Manse Road, and in the second stage, traffic flows east and west along St John's Road. Transport Planning proposes to add in a third cycle to allow for traffic to turn south onto Manse Road, adding 20 seconds to the cycle waiting time. (Paragraph 8.17, Traffic Assessment)

Transport Planning's own analysis (Tables 8.1 – 8.4 Traffic Assessment) concludes that queues and congestion on St John's Road and Manse Rd to congested levels will increase as follows:

- Congestion levels on Manse Rd will reach 96.1%, with queues rising from an average of 7.3 cars to 24 cars during weekday pm peaks. This is a very narrow road, with houses nearby, so residents will be exposed to new pollution. It is also a main pedestrian route for schoolchildren walking to Corstorphine Primary School. Children are especially vulnerable to the impacts of air pollution.
- Congestion levels on St John's Rd East Approach to reach 93.4%, with average queues on that road during pm weekday rush hour to rise from 13 to 25.2 vehicles long.

Even if we were to take Transport Planning's assessment and modelling to be correct in this respect, this would create unacceptable delays on the network, because according to Edinburgh Council, the road network is already often above capacity during peak hours with resulting irresolvable air pollution problems.

However, we do not believe that Transport Planning's Junction Analysis was correct - there are three flaws in it which have caused the overall impacts of waits and queues to be underestimated:

Firstly, we believe that Transport Planning has underestimated the number of queuing vehicles at the junctions in its baseline. It stated that at the St John's Road/Manse Road junction, there are maximum mean queues of 10 vehicles on the St John's Road West approach during the weekday morning peak, 14 vehicles on the East approach during the weekday evening peak, and 11 vehicles on the East approach during the Saturday peak. Transport Planning did not state when it conducted this survey or how long it carried out observations and has not supplied the raw data that corresponds with these averages.

Through discussions with local residents, and through conducting our own snapshot survey, we do not think these figures are accurate. We carried out a snapshot survey of traffic flowing at Manse Road on a Tuesday 4<sup>th</sup> August, during the school holidays so when one could expect traffic to be less than usual. In the morning, between 8:30 and 9:30, average queues on the St John's West approach were 14 vehicles. In the evening, between 4:30 – 5:30 average queues on the St John's East approach were 19 vehicles. On several occasions the network was clogged right through from the Manse Rd junction to beyond the Clermiston Road, with traffic unable to move through the green lights due to it backing up at other junctions. Often the queues we surveyed occurred when the lights were green. The traffic was thick and slow

and rarely reached speeds of more than 10mph. So our own observations were significantly higher than those of Transport Planning even though we conducted our survey at a quiet time of year.

Secondly, as already stated above in Objection (2), Transport Planning has used its survey results from Morningside's Waitrose to make projections about how many vehicles would visit the store for the Junction Analysis. For reasons detailed above, we consider the Morningside trip rates to be an underestimate of what travel choices would be made in Corstorphine. In reality, there could well be higher rates of vehicle visits, and therefore more queues, longer cycle times at the junction, and more air pollution.

Thirdly, Transport Planning has not modelled how the current pedestrian crossing between Manse Road and Clermiston Road (Belgrave Terrace) will impact on traffic queues. Currently, the pedestrian crossing creates queues which can back up right beyond the lights at both the Manse Rd and Clermiston Rd junctions during rush hour.

However, this problem will be made much worse because of all the new cars coming out of Manse Road and turning right onto St John's Road. If the pedestrian lights are signalled red, not all the cars will be able to get out of Manse Road, which will cause the traffic on Manse Rd to back up. Transport Planning has estimated that the degree of saturation on Manse Road will be 96.1% on a weekday p.m. peak (Table 8.2) but if it had accounted for the impact of the pedestrian crossing at Glebe Road, this surely could have pushed the degree of saturation to over 100%.

The delays to the network caused by changing Manse Road to two-way run against the Council's Local Transport Strategy policy on Road Upgrades, which states:

“Edinburgh's constrained road network, the impact of road traffic on quality of life and the need to meet climate change and air quality targets mean that it makes sense to favour strongly public transport for access into the city. The Council will support improvements to connectivity that do not increase traffic and congestion pressures in and around Edinburgh itself.”<sup>18</sup>

Making Manse Rd two-way is a fundamental flaw of this proposal. It cannot be mitigated through the use of planning conditions, due to the fact that delivery trucks would require access to the site and could not possibly go through Featherhall Terrace.

For this reason alone, the proposal should be refused.

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<sup>18</sup> City of Edinburgh Council Local Transport Strategy, paragraph 14.1.1, p 76

## Car Park Scale

**(4) The scale of the car park is far too large for the size of the development and no reasonable justification has been made for the deviation from the Edinburgh Council's Parking Standards. The core stated purpose of the exorbitant car parking allocation, namely to increase car parking provision in the area, is highly objectionable given the sensitive location of the development, and runs against the Local Transport Strategy, Active Travel Plan and Air Quality Action Plan. However, attaching a condition on the size of the car park would not make the proposal acceptable because it would not address the wider issues around traffic congestion and air pollution detailed in the rest of this objection.**

The scale of the car park would invite more cars into an already congested and polluted area, thereby worsening air pollution and undermining the Council's modal share targets. Research from the USA has shown that reductions in the amount of the parking around stores leads to less driving for grocery shopping<sup>19</sup> and Edinburgh Council's Local Transport Strategy notes, "parking availability has a large effect on people's travel choices"<sup>20</sup> (paragraph 12.4).

Realis proposes a 140-capacity car park, but has provided a poor justification for this out-of-scale car park.

Transport Planning conducted surveys of the Waitroses at Morningside and Comely Bank stores. It found that at those sites, the highest demand for car spots was in Morningside and was equivalent to 2.58 spaces per 100 square metres of floor area (paragraph 3.24 of the Traffic Assessment). If it had used this highest demand standard, this would have resulted in an output of 86 car parking spaces. 140 car parking spaces is 54 more spaces than Transport Planning's own analysis based on maximum requirements of other stores.

Transport Planning ignored its own analysis and opted to use a parking ratio of 3.96 spaces per 100 square metres, i.e. similar to the parking provision at Comely Bank (NB: this ratio is much higher than the actual maximum parking demand at Comely Bank, which is 1.98 spaces per 100 sq m), which results in 133 spaces. It then rounded this figure up to 140 spaces.

Transport Planning also ignored guidance contained in Edinburgh Council's Parking Standards for Development Management 2009 (Chapter 4, Table 7 of the Guidance). If Transport Planning had applied the Guidance, the development would result in parking provision of 51- 91 parking spaces. 140 car spaces is 49 more than the maximum allowed under CEC Parking Standards.

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<sup>19</sup> Jiao et al "Grocery Shopping: How Individuals and Built Environments Influence Choice of Travel Mode", *Transp Res Rec.* 2011; 2230: 85–95.

<sup>20</sup> City of Edinburgh Local Transport Strategy, paragraph 12.4

Transport Planning has attempted to argue that this standard does not apply to them because an “additional justification” of parking allocation is required for large developments. It has treated the requirement for additional justification of parking allocation for large developments as a loophole which exempts them from the parking ratios and rest of the policies in the Parking Standards. This is certainly not the case: the Parking Standards state in bold italics:

***“Please read the General Notes to All Tables in Chapter 4 as they apply to Large as well as Small and Medium developments”<sup>21</sup>***

Transport Planning’s “justification” of their inflated final figure is that a large car park would encourage more drivers to park in the area: “a key objective of the car park at the proposed food retail store is to also afford parking opportunity for those wishing to use the town centre...” (paragraph 3.26 of the Transport Assessment).

The fact that Realis wants to encourage more drivers to come and park next to the Air Quality Management Area is highly objectionable given the air pollution and congestion problems in the area and runs directly against several strands of the Council’s Parking Standards, Local Transport Strategy, Active Travel Action Plan, Air Quality Action Plan and detailed here:

#### *Breaches of Edinburgh Council’s Parking Standards 2009*

- Chapter 4.4 of the Parking Standards states,

“New development should not compromise the Council’s Local Transport Strategy. In particular, car parking levels must not encourage a car modal share that may compromise the Council’s mode share targets...To help keep car generation within target, the standards include maximum levels; these apply to most developments.”

- Chapter 4.5 states:

“Car parking provision above maximum standards will be acceptable only where the developer can demonstrate that it will not compromise the Council’s Local Transport Strategy or other Planning requirements.”

The Traffic Assessment has made no mention whatsoever of Edinburgh Council’s Local Transport Strategy or other Planning requirements in its justification of the scale of the car park.

#### *Breaches of the Local Transport Strategy*

- The Local Transport Strategy’s section 11.1, “Managing traffic and congestion” states<sup>22</sup>:

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<sup>21</sup> City of Edinburgh Council, Parking Standards for Development Management 2009

<sup>22</sup> City of Edinburgh Council, Local Transport Strategy 2014-2019, page 59, Step 3b, p 8

“...[T]here is simply not enough space in the city to accommodate all possible demands for movement by car at all times. It is therefore necessary to manage this demand... This is central to the strategy, and involves:

- ensuring that development is located and designed to minimise the need to travel by car...
- measures to restrain car use where there is congestion or serious impacts on other road users.”

The development’s stated aim of encouraging more parking runs explicitly against this and therefore is an unacceptable “justification” for over-provision of parking.

- The Local Transport Strategy’s Parking Objectives include:<sup>23</sup>
  - To minimise the negative impacts of parking on streetscape and on public and private space in new developments.
  - To improve road safety and reduce congestion and pollution.

- The Local Transport Strategy’s Parking Policy 24 provides:<sup>24</sup>

“Through the planning process, the Council will ensure that the parking provision in new developments is in accordance with the objectives of this strategy.”

- The Local Transport Strategy’s Environmental Objectives include:<sup>25</sup>

“To reduce pollutant emissions in order that the city meets statutory Scottish air quality standards.”

The Strategy notes at page 23 that the bulk of Nitrogen Dioxide pollution in the declared Air Quality Management Areas derives from road traffic emissions.<sup>26</sup>

Encouraging more road traffic into an Air Quality Management Area therefore runs against the Local Transport Strategy’s Environmental Objective.

- The Local Transport Strategy’s Active Travel Objectives include:<sup>27</sup>
  - “To increase the number of walking trips by making walking a more attractive, safe and convenient means of travel for short trips.

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<sup>23</sup> As above, p 62

<sup>24</sup> As above, p 69

<sup>25</sup> As above, p 22

<sup>26</sup> As above, p 23

<sup>27</sup> As above, p 43

- To ensure that cycling is an attractive, safe, secure option for all short and medium distance journeys.”

We have already noted that parking provision affects travel choices, and therefore the proposed car park would undermine the objective to increase walking and cycling trips. There is therefore also a breach of the Council’s Active Travel Action Plan.

We would not consider that it would be acceptable for the Council to allow this development to go ahead with a smaller car park required as a condition for approval.

This is because of the ongoing air pollution problem at the area due to the wider issues around traffic congestion and air pollution detailed in the rest of this objection and irresolvable issue of Manse Road becoming two-way, discussed above.

## **Air Quality Assessment Problems**

### **(5) There are a number of basic flaws in REC’s Air Quality Assessment (“AQA”), leading to question marks over its credibility and conclusions**

There are a number of basic mistakes and omissions throughout the AQA, which makes it very difficult to have confidence in the information presented.

For example:

- The St John’s Road air quality automatic monitoring station lies east, not west of the development as stated in Paragraph 4.2 of the Air Quality Assessment.
- The results of the Council’s diffusion tube air quality monitoring data displayed in Table 16 are mixed up, with incorrect 2013 readings for four out of the five diffusion tubes (sites 56, 1, 1b and 39).
- Results of Table 14 are incomplete as they do not use figures for 2014 which have now been ratified. This is important, because air quality has in fact deteriorated at the location; this should be taken into account. (see our Table 2 and Figure 1 above)

### **(6) It is not clear what vehicle trip rates REC have input into the air quality model, leading to a lack of certainty over the model’s outputs**

REC say they have modelled the air quality impact of the proposed development using “baseline traffic data for 2016 in addition to development flows and vehicle trips associated with the proposal.” (Paragraph 5.2.1 of the AQA). But it is not clear which of the two contradictory vehicle trip assessments provided by Transport Planning they have offered, and neither of the numbers detailed in Appendix II of the AQA match with either assessment provided by Transport Planning.

Our best deduction is that the Morningside vehicle trip rates have been used to feed into the air quality model, because Transport Planning has stated “It is considered that the use of the surveyed Morningside trip rates is the most appropriate one to offer a robust traffic assessment.” (paragraph 7.16 of the Traffic Assessment). If this is indeed the case then we believe the air quality impacts must be underestimated due to the Morningside vehicle trip rates not being appropriate for this store, discussed above in Objection (2).

**(7) The height of the proposed building will increase the canyon effect at the location making it more difficult for air pollution to disperse; the AQA has failed to consider and model these impacts.**

In urban settings, where the road is flanked by tall buildings on both sides, this can create what is known as a “canyon effect”, meaning that pollution generated by traffic gets trapped and cannot disperse as easily.

There is a canyon effect worsening the air pollution generated by road traffic along the rest of St John’s Road and is considered by the Council’s air quality team to be exacerbate the air pollution problem in the St John’s Road Air Quality Management Area.

By converting the existing building from one to three storeys, this development would worsen the canyon effect in the area and trap air pollution.

The canyon effect was not discussed in the dispersion modelling work which REC conducted for the developer, leading to an incomplete analysis and an underestimate of the air quality impacts.

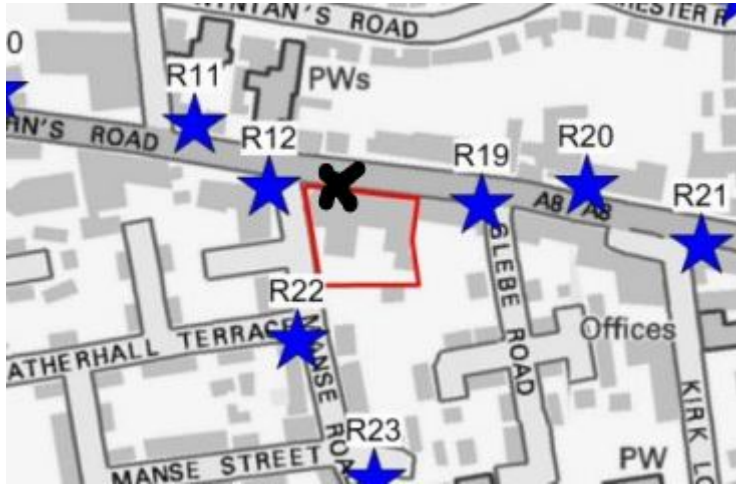
**(8) The AQA has failed to project air quality impacts outside the store entrance itself where a large impact on traffic is expected and where a large number of people will be exposed. The AQA is therefore incomplete and underestimates impacts.**

REC has modelled the air quality impacts of the proposal at a number of “sensitive receptor” locations which it has defined, at paragraph 4.4. AQA, as “any location which may be affected by changes in air quality as a result of a development.” The locations of the sensitive receptors are detailed in Figure 7, Appendix II.

However, it has failed to model air quality impacts at the location just outside the shop entrance on the East approach of the St John’s Rd/Manse Rd junction, indicated in Figure 2 by the black cross. This is crucial because this is where the Traffic Assessment expects traffic queues to increase from 13 to 25.2 during weekday rush hour, bringing the “Degree of Saturation” to 93.4%. It is also where the pavement will be narrowed and the bus lanes removed, bringing people closer to the source of pollution. It is also where many people will be exposed due to it being by the shop entrance.

*Figure 2: Key location where REC have failed to model air quality impacts*





This is an unacceptable omission which renders the AQA incomplete.

**(9) The removal of the bus lanes at the Manse Road/St John's Road junction will force buses to idle for longer as they compete with cars and other vehicles for road space, causing more air pollution. This runs against the Local Transport Strategy and the efforts of the Air Quality Action Plan. The impacts of additional bus idling on air quality have been overlooked by REC's Air Quality Assessment, leading to an incomplete air quality analysis.**

The diagrams in Appendix B of the Transport Assessment indicate that the bus lanes running up to the Manse Rd/St John's Rd junction will be removed on both the West and East Approaches, meaning buses will have to queue amongst the rest of the traffic at the Manse Rd junction.

This runs against the following Public Transport Policies contained in the Local Transport Strategy:<sup>28</sup>

- "PubTrans1: The Council will presume in favour of giving buses and Trams priority over other motorised traffic."
- "PubTrans7": The Council will continue to maintain the bus lane network, review it regularly and extend it or enhance it where opportunities arise....

The removal of the bus lanes will force buses to idle in amongst traffic at the places where it matters most for them to be afforded priority, i.e. through the lights. This will worsen air pollution substantially, because already, buses contribute a great proportion of St John's Road's air pollution: between 37 – 41% according the Edinburgh Council's 2011 estimates.<sup>29</sup> Slowing and making progress more stop-start for the buses on this polluted section of road

<sup>28</sup> City of Edinburgh Council Local Transport Strategy, page 52

<sup>29</sup> City of Edinburgh Council, Further Assessment of Air Quality 2011, Fig 2A and 2B

undermines the key focus of the Council's Air Quality Action Plan on St John's Road which is to tackle bus emissions.<sup>30</sup>

Furthermore, by bringing more traffic into the left-most lanes, pedestrians will be exposed to much higher concentrations of traffic pollution. Pollution levels fall off quite rapidly from the source so by bringing pedestrians metres closer to the source of traffic pollution, their exposure levels will be much higher and closer to road concentration levels rather than to background concentration levels which are predominantly discussed in the Air Quality Assessment.

The Air Quality Assessment has overlooked the impact of the bus delays on air quality and on people's exposure to the source of pollution which is an unacceptable omission, once again rendering the AQA incomplete and underestimating damage to air quality.

**(10) The proposal has failed to consider and model impacts of the proposal on short term air quality legal limits and safety standards, which are already regularly broken at this location.**

As discussed at the outset, under the Local Air Quality Management system and European Law, there is a short-term hourly concentration threshold for Nitrogen Dioxide of 200 microgrammes per cubic metre which should not be exceeded more than 18 times in one year, taken as an hourly average. Local councils were due to achieve this standard by 31 December 2015 under the Local Air Quality Management system and the Scottish Government is currently in breach of a binding European legal deadline to have achieved compliance with this limit by 1 January 2010.

Exposure to such levels of NO<sub>2</sub> can irritate the lungs, lower resistance to respiratory infections like flu, and may increase incidence of acute respiratory symptoms in children.

According to DEFRA's LAQM Technical Guidance, the short term standard applies to "any outdoor locations where members of the public might reasonably expected to spend one hour or longer."<sup>31</sup>

In St John's Road this hourly limit is regularly broken (see our Table 2) and the Air Quality Management Area has been declared in respect of the hour term standard as well as the annual limit. The breach of the short term standard often happens during rush hour because that is when the road network is blocked and pollution builds up and can create a "spike".

Because this development expects to have most of its traffic during rush hours (Appendix D of the Traffic Assessment), this will accentuate the impact on peak congestion hours. By only modelling the impact on the annual

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<sup>30</sup> Air Quality Progress Report 2014, p 126

<sup>31</sup> DEFRA, "Part IV of the Environment Act 1995 Environment (Northern Ireland) Order 2002 Part III Local Air Quality Management Technical Guidance LAQM.TG(09)" (February 2009), Box 1.4

average, the air quality assessment has ignored the short term spikes in pollution that can be expected from the additional impact of traffic being generated at the worst possible time of day for the road network.

Furthermore, potential shoppers and pedestrians would be exposed to air pollution levels for short periods of time, so the short term standard is particularly relevant to them and should have been modelled and accounted for.

**(11) The building will reduce the size of the pavement meaning that pedestrians are forced to walk closer to the road, exposing them to higher concentrations of pollution. This has been overlooked by the AQA.**

As discussed above, it is generally understood that pollution declines considerably with distance from the source.<sup>32</sup> The proposed building will reduce the pavement size on St John's Road and Manse Road considerably. Combined with the fact that cars will be idling in what is currently the bus lane (discussed above), the distance between pedestrians and the pollution source will be narrowed by approximately 5m.

The Air Quality Assessment has wholly overlooked the fact that pedestrians will be much closer to the source of pollution, yet again leading to an incomplete analysis.

## **Other detrimental impacts to the local area**

**(12) The removal of several trees will be a great loss to the area**

Realis proposes to remove a large mature Grade A Oak tree which has been assessed as having at least 40 years of life left in it, as well as three other trees. The oak tree should certainly be considered worthy of retention. We consider this to be in breach of Local Development Plan Env 12, which states,

“Development will not be permitted if likely to have a damaging impact on a tree or trees protected by a Tree Preservation Order or other trees worthy of retention on or around a proposed development site, unless necessary for good arboricultural reasons. Where such consent is granted, replacement planting will be required to offset the loss to amenity.”

The removal of this and other trees will deteriorate the quality of the setting and this is not offset by any benefit of the proposal but rather exacerbates the other potential harms of the proposal we have already outlined.

We also consider the removal of the oak and other trees to run against Edinburgh's Design Guidance, which states,

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<sup>32</sup> Brugge et al, 'Near-highway pollutants in motor vehicle exhaust: A review of epidemiologic evidence of cardiac and pulmonary health risks' Environmental Health 2007, 6:23

“Retention of trees and woodland within new development gives a sense of maturity and raises the overall quality of the setting. Where trees are damaged and then decline or where inappropriate design leads to conflict, these positive benefits are lost.”<sup>33</sup>

**(13) Children will have to cross over a wide delivery vehicle and customer car entry/exit, which will make the walk to school more dangerous and may encourage more parents to drive their children to school.**

The vehicle entry/exit will be located on Manse Road which is where many children walk to school. The Proposed Ground Floor Plan indicates that the entrance/exit will be approximately 12m in diameter, which is much wider than the current car park entrance diameter of approximately 4m.

There will only be a courtesy crossing provided, which affords pedestrians much lower priority than a pelican crossing or signalled stop. Courtesy crossings are not official pedestrian crossings and do not require vehicles to stop.

This proposal runs against the Council’s Active Travel Action Plan which lies at the heart of the Local Transport Strategy.

It also runs counter to the following sections of the Local Development Plan:

- Paragraph 3.10, “The layout of development should enhance community safety and urban vitality.”
- Policy Tra 6: “the design of surface car parking or entrances to car parking in buildings should not compromise pedestrian safety.”

## **Misleading pre-consultation information**

**(14) Misleading information was given at the Pre-Application Consultation which may have prevented people from objecting**

At a Pre-Consultation meeting with a representative of Realis in December 2014, we raised a concern that the development would generate new traffic along an already congested road with high levels of air pollution. We were told that the traffic would not increase because the store is located on a busy radial route and would pick up passing trade, therefore the network’s traffic would not increase. This is confirmed by the PAC summary at page 12.

However, this reassurance made to us is directly contradicted by the Traffic Assessment which anticipates that 50% of the visits during weekday peaks will be newly generated traffic, and that 70% of Saturday peak hour visits will be newly generated.

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<sup>33</sup> City of Edinburgh Council, Edinburgh Design Guidance (2013), p83

We are therefore concerned that other members of the public who raised similar concerns were given false assurances and have therefore failed to object because they have been misled by Realis on this point.

## Conclusions and application of relevant planning guidance

We have shown that:

- The location of the proposal is highly sensitive, with elevated levels of pollution which are worsening, not improving (*set out in our summary and introduction, pages 2-4*)
- The premise of the development, namely to increase parking capacity to the area is out of step with the imperative to ease congestion in the area as recognised by Edinburgh Council's Air Quality Action Plan, and also runs against several parts of the Council's Local Transport Strategy and Parking Standards (*Objection 4*)
- Both the Traffic Assessment and Air Quality Assessment have made fundamental errors and underestimated the overall impacts of the proposal in a number of different ways, with the resulting possibility that air pollution will be worsened far more than projected by Realis, causing unacceptable damage to health; (*Objections 2-3 & 5-11*)
- There will be other adverse impacts including danger to pedestrians and schoolchildren crossing the delivery and vehicle entrance on Manse Rd and loss of old trees. (*Objections 12 & 13*)
- These adverse impacts far outweigh the stated benefit of the site of bringing jobs to the area
- The adverse impacts cannot be mitigated through the use of planning conditions: whilst planning conditions could be attached to reduce the car park size, the most fundamental problem which cannot be resolved is the making of Manse Rd two-way. (*Objection 3*)

The Institute for Air Quality Management's "Land-Use Planning & Development Control: Planning for Air Quality" Guidance (May 2015) provides relevant guidance on how to achieve balance between economic, social and environmental considerations. It states:<sup>34</sup>

"In arriving at a decision about a specific proposed development the local planning authority is required to achieve a balance between economic, social and environmental considerations. For this reason, appropriate consideration of issues such as air quality, noise and visual amenity is necessary. In terms of air quality, particular attention should be paid to:

- compliance with national air quality objectives and of EU Limit Values
- whether the development will materially affect any air quality action plan or strategy;
- the overall degradation (or improvement) in local air quality; or
- whether the development will introduce new public exposure into an area of existing poor air quality."

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<sup>34</sup> Environmental Protection UK and Institute of Air Quality Management, 'Land-Use Planning & Development Control: Planning For Air Quality' (May 2015) Paragraph 3.4

We note in this regard:

- There is an ongoing problem with both national air quality objectives and EU limit values at the site (see Table 2)
- The development would undermine the key efforts of the air quality action plan to ease congestion and improve bus emissions in the area
- Air quality appears to be worsening in the area (see Table 2)
- The proposal would create new public exposure to air pollution due to a combination of added vehicle visits, delayed junction cycle times at the Manse Rd junction, increased canyon effect due to the building being two-storey, a narrowing of the pavement widths along Manse Rd and St John's Rd, new congestion problem anticipated on Manse Rd and new visitors coming into the area. (discussed in detail in the next sections of our objection)

The Planning for Air Quality Guidance also states:<sup>35</sup>

“Where a planning application runs counter to relevant local policies, it is not normally permitted, unless other material planning considerations outweigh the objections and justify granting permission.”

We have demonstrated above that this application runs against several strands of the Local Transport Strategy, Air Quality Action Plan, Parking Standards, Active Travel Action Plan and Local Development Plan.

The Guidance carries on to state:

“Any air quality issue that relates to land use and its development is capable of being a material planning consideration. The weight, however, given to air quality in making a planning application decision, in addition to the policies in the local plan, will depend on such factors as:

- The severity of the impacts on air quality;
- The air quality in the area surrounding the proposed development;
- The likely use of the development, i.e. the length of time people are likely to be exposed at that location; and
- The positive benefits provided through other material considerations.<sup>36</sup>

Based on the information we have provided, all the factors taken into account must surely lead to refusal of this planning application.

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<sup>35</sup> As above, paragraph 4.16

<sup>36</sup> As above, paragraph 4.17