Gaywood Parkway Housing Development

Air Quality Summary

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Background

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Development Overview - 21/01873/FM:

- New development of 226 homes
- Site is accessed off Parkway but connects to cycling and walking routes (prioritised LCWIP routes).
  - This reduces the number of vehicle trips per dwelling (and vehicle emissions).
  - Trip rate predicted to be one of the lowest in the district due to this level of connectivity, making it an example of good practice.
- Vehicle access via the Gaywood Clock Air Quality Management Area (AQMA).

Gaywood Clock Air Quality Management Area (AQMA)

- Gaywood Clock junction is designated as an AQMA due to nitrogen dioxide (NO_2) mostly from traffic, exceeding the annual mean objective (40µg/m^3).
- µg/m^3 = micrograms per cubic metre of air
- Where an exceedance is identified the local authority must declare an AQMA and prepare an Air Quality Action Plan (AQAP) that secures and maintains the air quality standards.
- No exceedance for over 5-years.

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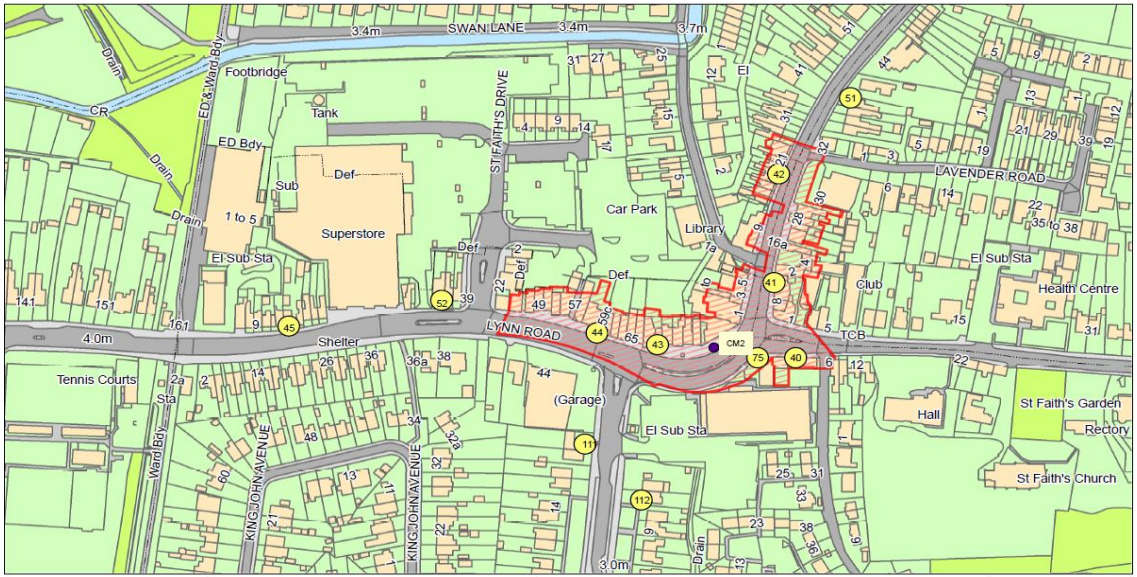
Gaywood Clock AQMA – the designation and AQ monitoring locations:



Borough Council of King's Lynn & West Norfolk Tel. 01553 616200 - Fax. 01553 691663	Title: **Gaywood Clock Air Quality Management Area**	Scale: **1:2,330** Date: **10/01/2024**	© Crown copyright and database rights 2020 Ordnance Survey 100024314
	Project / Details: **Extent of the AQMA and AQ Monitoring locations**	Drawn by / Department: **EQT** Drawing / Reference Number: **2024**	

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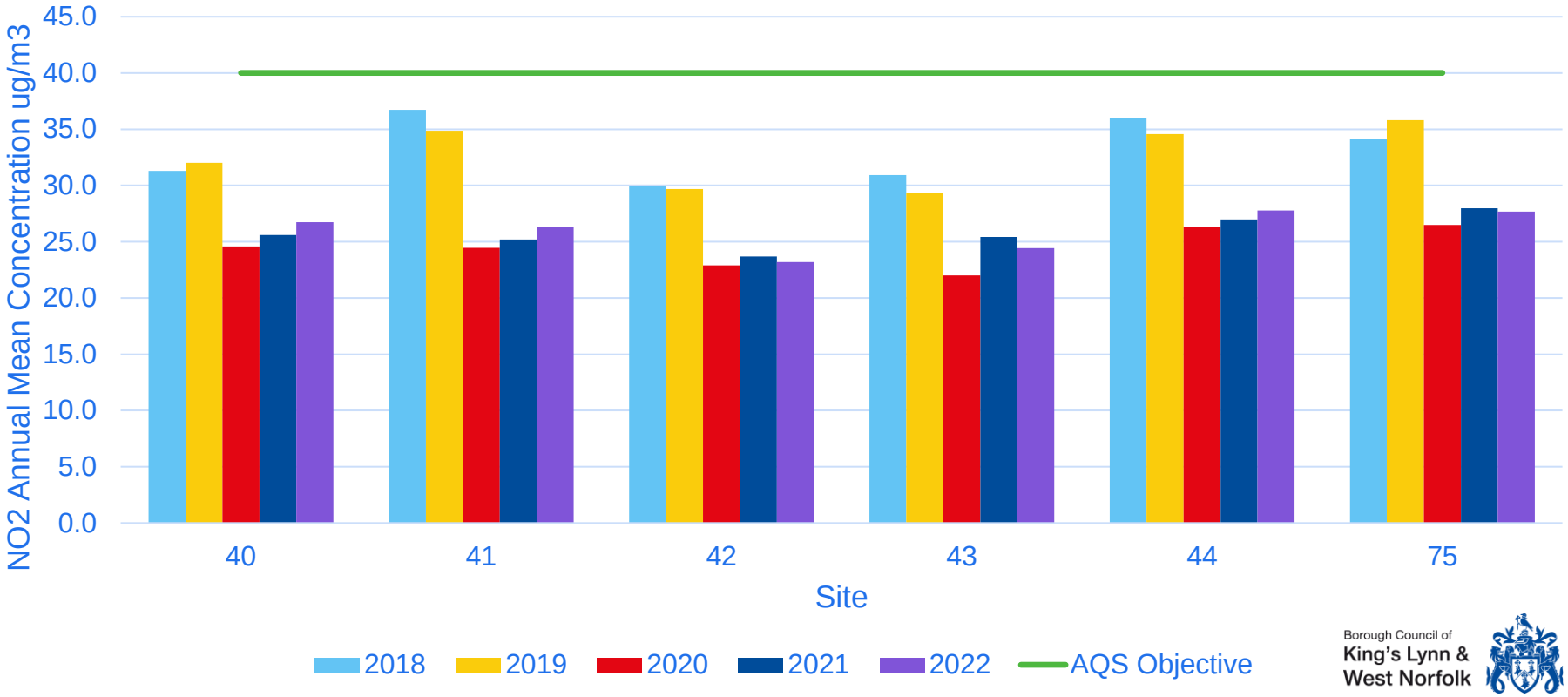
Trends in Nitrogen Dioxide (NO_2) from AQ monitoring sites around the Gaywood Clock AQMA – no exceedances in NO_2 for over 5-years;



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Parkway Air Quality Assessments

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Air Quality Assessments

- Traffic pollutants and dust from construction considered.
- Impacts on sensitive receptors assessed including homes along Queen Mary Rd, Gaywood Clock AQMA and nearby schools.
- Additional traffic predicted as 714 cars per day.
- Traffic pollutants (Nitrogen Dioxide - NO_2)
- Construction dusts (Particles - PM_{10})
- Dust impacts considered conservatively due to the proximity of the Academy School.
- The impact of air pollution from traffic predicted as negligible with an increase of 0.33µg/m^3 NO_2 and 0.09µg/m^3 PM_{10} along Queen Mary Road.

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Air Quality Monitoring Schemes

- **Construction** - Dust impacts from construction activity were potentially higher due to the proximity of the school.
  - As a result, real-time monitoring of construction dust to be implemented.
- **Traffic** - Like the approach taken on Lynnsport Way for the Lynnsport development, additional NO_2 monitoring of traffic pre and post development.
  - Monitoring scheme implemented already with new diffusion tubes located.

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Mitigation of emissions

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Mitigation of emissions

- Properties to benefit from air source heat pumps i.e. with zero NO_2 emissions;
- Some dwellings to benefit from PV panels;
- Electric vehicle charging points;
- Cycle parking;
- High level of connectivity to prioritised LCWIP routes;
- Residential Travel Plan with surveys to demonstrate modal shift;

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Conclusions

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Conclusions

- Impact of traffic pollution from Parkway development on the Gaywood Clock AQMA was predicted as negligible impact.
- Development still designed to mitigate emissions in accordance with best practice according to the Air Quality Action Plan (AQAP).
- AQAP is to secure and maintain the air quality standards going forward.

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Going forward

- Consultation on AQAP with updated Measures
- Open until 1st March 2024
- https://www.west-norfolk.gov.uk/aqap-consultation

  - **Measure 5.2** - to improve public awareness of air pollution by improved AQ monitoring and information systems;
    - Air quality monitoring to continue around the Gaywood junction with new monitoring schemes being implemented.

  - **Measure 3.4** – as NO2 results compliant for more than 5-years in Gaywood Clock AQMA;
    - To review the results as part of this revised AQAP.
    - To report on this later this year (2024).

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