CRAIGAVON
Borough Council

2013 Air Quality Progress Report for Craigavon Borough Council

In fulfillment of the Environment (Northern Ireland) Order 2002 - Local Air Quality Management

April 2013

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Executive Summary

Monitoring at 7 locations within Craigavon Borough Council's area has demonstrated that there are no sites were NO_2 levels exceeded the objective limit of 40µg/m^3. Craigavon Borough Council is now in the process of delivering an Action Plan for the AQMA's at Lurgan Road (Portadown) and Flush Place (Lurgan) where the NO_2 objective was exceeded in 2010.

However, the Updating and Screening Assessment for 2012 and this Progress Report (2013) have shown that the air quality objective was not breached at Lurgan Road (Portadown) & Flush Place (Lurgan) in the last two consecutive years (2011 and 2012) where there are currently AQMA's in situ. Whilst Craigavon Borough Council has the option of proposing a revocation of these AQMA's, it has been decided to continue diffusion tube monitoring at these sites for a further year to verify if the pollution levels will continue to remain below the objective level of 40 µg/m^3. A decision on the revocation of one or both of these AQMA's will be highlighted in the Council's Progress Report in April 2014.

No other pollutants were assessed to have an impact on air quality within the borough at this time.

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1 Introduction

1.1 Description of Local Authority Area

Craigavon Borough Council is a local council located mostly within County Armagh, in Northern Ireland. Situated on the southern shores of Lough Neagh, Craigavon is a new town that was built between Lurgan and Portadown during the late 1960's. The council area includes the large towns of Lurgan and Portadown, as well as smaller ones including Waringstown and Donaghcloney.
The area is served by the M1 motorway, with major road links to the business capital of Belfast, west towards Armagh City, south to Dublin; and west to Donegal and Sligo.

The main railway line from Belfast to Dublin operates through the Borough with stops at Portadown and Lurgan. Express services between Belfast and Dublin serve Portadown only, whilst commuter services utilise stations at both Portadown and Lurgan.

The Borough has a small level of heavy industry operating from several industrial estates including those at Seagoe, Mahon and Carn. The majority of the local work force is employed in the delivery of services such as local government, pharmaceuticals, education authority, health and social services, retail, agriculture and food processing.

The greatest contribution to air quality pollution is from road traffic. Particularly in the town centres of Portadown and Lurgan where the road network is quickly reaching it's maximum capacity due to the increase in car ownership. Given the size of the rural hinterland within the Borough, public transport resources are stretched and the reliance on the motor car is greatly exacerbated. Particulate Matter (PM10) and NO_2 would be considered as the pollutants most at risk of breaching the objective limits in Craigavon as a result of road traffic.

1.2 Purpose of Progress Report

Progress Reports are required in the intervening years between the three-yearly Updating and Screening Assessment reports. Their purpose is to maintain continuity in the Local Air Quality Management process.

They are not intended to be as detailed as Updating and Screening Assessment Reports, or to require as much effort. However, if the Progress Report identifies the risk of exceedence of an Air Quality Objective, the Local Authority (LA) should undertake a Detailed Assessment immediately, and not wait until the next round of Review and Assessment.

1.3 Air Quality Objectives

The air quality objectives applicable to LAQM **in Northern Ireland** are set out in the Air Quality Regulations (Northern Ireland) 2003, Statutory Rules of Northern Ireland

2003, no. 342, and are shown in Table 1.1. This table shows the objectives in units of micrograms per cubic metre μg/m^3 (milligrammes per cubic metre, mg/m^3 for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

Table 1.1 - Air Quality Objectives included in Regulations for the purpose of Local Air Quality Management in Northern Ireland.

Pollutant	Concentration	Measured as	Date to be achieved by
Benzene	16.25 $\mu g/m^3$	Running annual mean	31.12.2003
	3.25 $\mu g/m^3$	Running annual mean	31.12.2010
1,3-Butadiene	2.25 $\mu g/m^3$	Running annual mean	31.12.2003
Carbon monoxide	10.0 mg/m^3	Running 8-hour mean	31.12.2003
Lead	0.5 $\mu g/m^3$	Annual mean	31.12.2004
	0.25 $\mu g/m^3$	Annual mean	31.12.2008
Nitrogen dioxide	200 $\mu g/m^3$ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 $\mu g/m^3$	Annual mean	31.12.2005
Particles (PM_{10}) (gravimetric)	50 $\mu g/m^3$, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 $\mu g/m^3$	Annual mean	31.12.2004
Sulphur dioxide	350 $\mu g/m^3$, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 $\mu g/m^3$, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 $\mu g/m^3$, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

1.4 Summary of Previous Review and Assessments

Table 1.4- Summary of Previous Review and Assessment Report completed by Craigavon Borough Council

Report Type	Date	Exceedences	Detailed Assessment Required	AQMA's Declared
Initial Review and Assessment	Jan 2001	None	No	None
Progress Report	April 2005	None	No	None
Updating & Screening Assessment	April 2006	None	No	None
Progress Report	April 2007	None	No	None
Progress Report	April 2008	None	No	None
Updating & Screening Assessment	April 2009	None	No	None
Progress Report	May 2010	None	Yes	TBC
Progress Report	April 2011	Yes	Yes	Yes
Updating & Screening Assessment	April 2012	No	No	No

2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

There are no automatic monitoring sites within the Craigavon Borough Council area.

2.1.2 Non-Automatic Monitoring

During 2012 Craigavon Borough Council carried out monitoring of NO_2 by diffusion tubes at seven sites within the Borough. The NO_2 diffusion tubes were prepared and analysed by Environmental Scientifics Group Limited (ESG). ESG Didcot was contracted to supply and analyse the diffusion tubes from the beginning of April 2010. This laboratory takes part in the NO_2 Network QA/QC Field Intercomparison survey. ESG's diffusion tubes are prepared by coating the grids in 50% TEA in Acetone. Analysis is carried out using a colorimetric technique.

None of the sites were co-located with an automatic NO_2 analyser. Details are given in Table 2.2.

Diffusion Tube Bias Adjustment Factors

The NO_2 diffusion tubes were prepared and analysed by Environmental Sciences Group (ESG) Didcot from the beginning of January 2012. This laboratory takes part in the NO_2 Network QA/QC Field Intercomparison survey. ESG's diffusion tubes are prepared by coating the grids in 50% TEA in Acetone. Craigavon Borough Council obtained the appropriate bias factor from the DEFRA Website. http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html A bias factor of **0.79** was taken from the drop down menus available on the excel spreadsheet matrix.

Factor from Local Co-location Studies (if available)

Craigavon Borough Council did not use a Bias Factor from a local Co-location study. Craigavon does not have an automatic NO_2 analyser in the district to carry out a co-location assessment. Also, although a co-location factor may be available from two other neighbouring councils (Armagh & Newry), it was felt that the national bias factor was drawn from a greater range of sites and could therefore be considered overall more representative of the sites monitored in the borough.

Discussion of Choice of Factor to Use

Craigavon Borough Council used the Bias Factor from the Defra Website. http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html. This was calculated by using the matrix available on the site by selecting the appropriate laboratory, year of monitoring and significant methodology. Craigavon Borough Council used a bias factor for 2012 (0.79)

QA/QC of diffusion tube monitoring

See Appendix A for Environmental Scientifics Group (ESG) WASP data

Table 2.2 Details of Non- Automatic Monitoring Sites

Site Name	Site Type	OS Grid Ref	Pollutants Monitored	In AQMA ?	Relevant Exposure? *(Y/N with distance (m) to relevant exposure)*	Distance to kerb of nearest road *(N/A if not applicable)*	Worst-case Location ?
Ardboe Drive Lurgan	Urban Background	-	NO_2	N	Y(<1)	15m	N
Ballyhannon Rd Portadown	Urban Background	-	NO_2	N	Y(4)	10m	N
Ashgrove Community Centre Portadown	Urban Background	-	NO_2	N	Y(10)	10m	N
Lurgan Road Portadown	Roadside	-	NO_2	N	Y (<5m)	2m	Y
Queen St Lurgan	Roadside	-	NO_2	N	Y (<5m)	2m	Y
Flush Place (King St) Lurgan	Roadside	-	NO_2	N	Y (<5m)	2m	Y
Lough Rd Lurgan	Roadside	-	NO_2	N	Y (<5m)	2m	Y

Figure 2.2 Map(s) of Non-Automatic Monitoring Sites (if applicable)

See Appendix B for Maps

2.2 Comparison of Monitoring Results with Air Quality Objectives

2.2.1 Nitrogen Dioxide

There are no automatic monitoring sites within the Craigavon Borough Council Area

Automatic Monitoring Data

Craigavon Borough Council does not have any automatic monitoring sites in the Council district

Diffusion Tube Monitoring Data

Craigavon Borough Council monitors NO_2 pollution using diffusion tubes at 13 (reduced to 9 sites in September 2010) sites throughout the borough. These sites are located in Lurgan, Portadown and Craigavon. All of the tubes are positioned in accordance with the practical guidelines published by AEA Energy and Environment in a report to Defra and the Devolved Administrations.

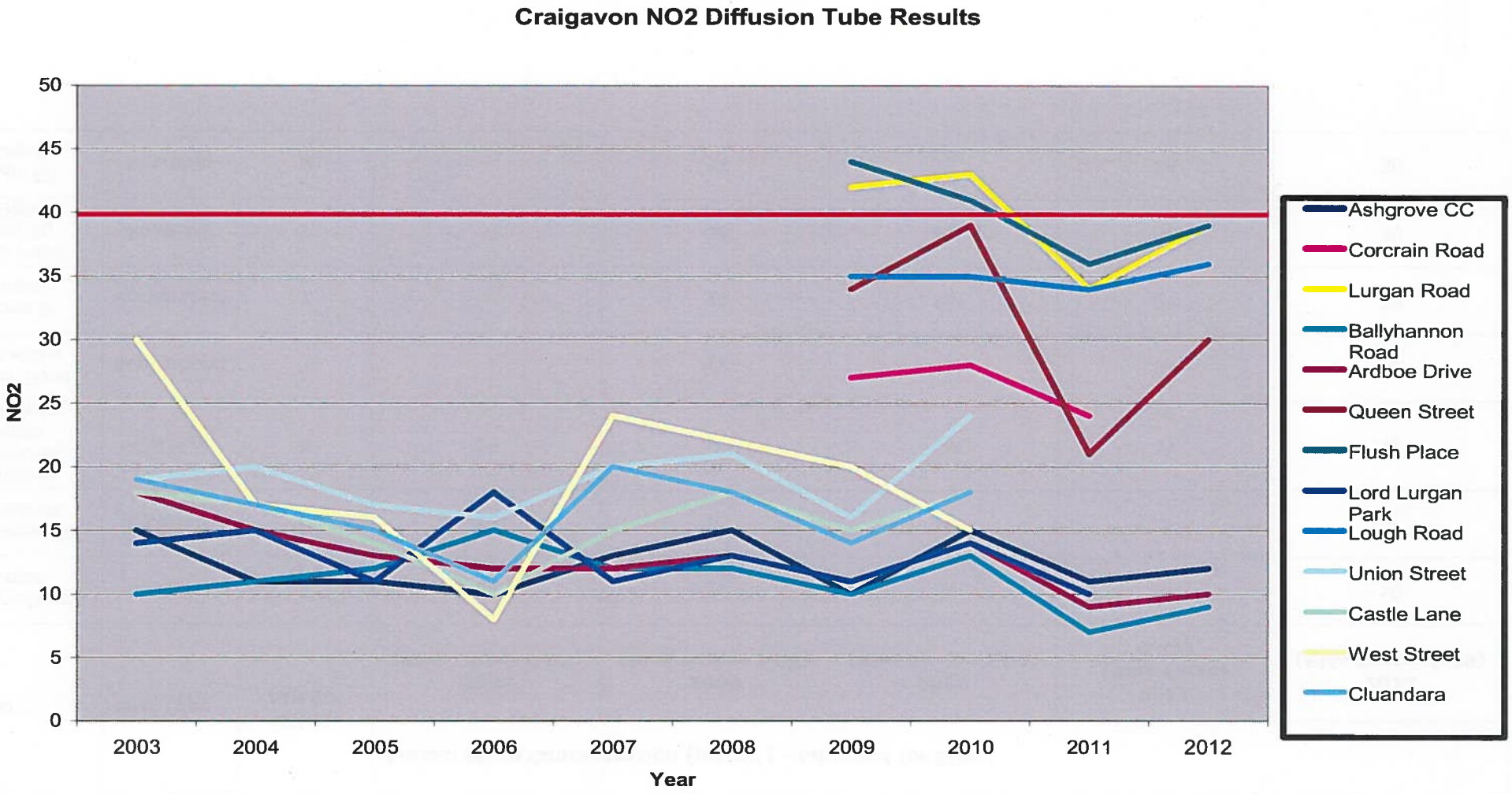
Table 2.4a Results of Nitrogen Dioxide Diffusion Tubes

Site ID	Location	Within AQMA?	Data Capture for full calendar year 2012 %	Data Capture for monitoring period %	Annual mean concentrations 2012 (µg/m^3) Adjusted for bias
1	Ardboe Drive Lurgan	N	100	100	10
2	Ballyhannon Rd Portadown	N	100	100	9
3	Ashgrove Community Centre Portadown	N	92	100	12
4	Lurgan Road Portadown	N	100	100	39
5	Queen St Lurgan	N	100	100	30
6	King St Lurgan	N	100	100	39
7	Lough Rd Lurgan	N	100	100	36

Table 2.4b Historical Results of Nitrogen Dioxide Diffusion Tubes

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2008 (Bias Factor 0.98)	2009 (Bias Factor 1.03)	2010 (Bias Factor 1.02)	2011 (Bias Factor 0.84)	2012 (Bias Factor 0.79)
Ardboe Drive Lurgan	Roadside	N	13	11	14	9	10
Ballyhannon Rd Portadown	Roadside	N	12	10	13	7	9
Ashgrove Community Centre Portadown	Roadside	N	15	10	15	11	12
Lurgan Road Portadown	Background	Y	-	**42**	**43**	34	39
Queen St Lurgan	Background	Y	-	34	39	21	30
Flush Place (King St) Lurgan	Roadside	Y	-	**44**	**41**	**36**	39
Lough Rd Lurgan	Roadside	N	-	35	35	34	36

Figure 2.3 Trends in Annual Mean NO_2 Concentrations Measured at Automatic Monitoring Sites



2.2.2 PM_{10}

Craigavon Borough Council does not carry out monitoring for PM10 pollution at this time

2.2.3 Sulphur Dioxide

Craigavon Borough Council does not carry out monitoring for Sulphur Dioxide at this time.

2.2.4 Benzene

Craigavon Borough Council does not carry out monitoring for Benzene at this time.

2.2.5 Other pollutants monitored

Not Applicable

2.2.6 Summary of Compliance with AQS Objectives

Craigavon Borough Council has examined the results from monitoring in the borough. Concentrations are all below the objectives, therefore there is no need to proceed to a Detailed Assessment.

3 New Local Developments

Craigavon Borough Council confirms that there are no new or newly identified local developments which may have an impact on air quality within the Local Authority area.

4 Local / Regional Air Quality Strategy

There are currently no Local or Regional Air Quality Strategies applicable to Craigavon Borough Council. The Southern Group Air Quality Strategy came to an end in 2010. No further strategies are planned at this time.

5 Planning Applications

There were no planning applications submitted to The Northern Ireland Planning Service within the Craigavon Borough Council area during 2012 which were deemed to have any impact on local air quality.

6 Air Quality Planning Policies

N/A

7 Local Transport Plans and Strategies

Regional Transportation Strategy

The Regional Transportation Strategy (RTS) for Northern Ireland 2002- 2012 identifies strategic transportation investment priorities and considers potential funding sources and affordability of planned initiatives. The RTS focuses on three geographic areas and one overlying Network. These are as follows:

- Belfast Metropolitan Area (BMA), containing the continuous area comprising Belfast City Council and the built-up areas within the Council areas of Carrickfergus, Castlereagh, Lisburn, Newtownabbey and North Down;
- Other Urban Areas (OUAs): collectively those towns described as main or local hubs in the RDS (including Craigavon) and other towns outside the BMA with a population greater than 5,000);
- Rural Area – the remainder of Northern Ireland; and
- Regional Strategic Transport Network (RSTN) comprising the complete rail network and all motorway and trunk road links (including the Key Transport Corridors and Link Corridors).

The RTS is a "daughter document" of the Regional Development Strategy (RDS), which sets out the spatial development framework for Northern Ireland up to 2025. Implementation of the Strategy will be through three Transport Plans covering the Regional Strategic Transport Network (RSTN), the Belfast Metropolitan Area (BMA), and the Sub-Regional Transport Plan (SRTP). Transport studies undertaken to support the RSTN Transport Plan will take due account of current and future cross-border inter-urban transport demands and the roles of the gateway cities and towns, including Craigavon.

3.4 Regional Strategic Transport Network Transport Plan

The Regional Strategic Transport Network (RSTN) Transport Plan prepared by the Department for Regional Development (DRD) covers the complete rail network, five Key Transport Corridors (KTCs), four Link Corridors, the Belfast Metropolitan Transport Corridors and the remaining trunk network across Northern Ireland. The Plan is based on the guidance set out in the Regional Development Strategy (RDS) and the Regional Transportation Strategy (RTS), as described in Sections 3.2 and 3.3 of the RSTNT Plan.

The RSTN Transport Plan consists of proposals for transport schemes and measures for the maintenance, management and development of the RSTN until 2015. The RSTN Transport Plan also includes a number of measures for rail, bus, roads, walking and cycling.

3.5 Sub-Regional Transport Plan 2015

The Sub-Regional Transport Plan (SRTP) was prepared by the Department for Regional Development (DRD) and completed in 2007. The SRTP is based upon the guidance provided by the Regional Development Strategy (RDS) and the Regional Transportation Strategy (RTS). Proposed public transport measures for Craigavon (within category of Other Urban Areas (OUA)) contained within the SRTP are as follows:

· Improved walk/cycle

· Improved local bus services

· Bus stop Improvement Strategy

· Bus based Park and Ride

· Increased parking at bus/rail station

· Taxi rank

· Transport Programme for People with Disabilities

Spatial Development Strategy for Northern Ireland

The Spatial Development Strategy (SDS) guides the physical development of the Region to 2025. The SDS will contribute to meeting a number of key regional challenges emerging from the significant local, national and international forces, which will drive change over the next 25 years, including:

Transport:

- Promote a change in travel culture and particularly manage the effects of a possible 100% growth in the number of vehicles by 2025;
- Contribute to the creation of a modern, sustainable, safe transportation system for the Region, meeting the travel needs of all groups in society;
- Accommodate the growing volume of freight moving to and from the regional gateways; and
- Strengthen the regional gateways to handle the increasing flow of people and goods in and out of the Region.

Environment:

- Accommodate future development growth while protecting and caring for the environment;
- Reduce the consumption of resources;
- Continue to maintain or, where needed, to improve the quality of air, water and land resources within the Region;
- Seek to maintain local landscape character and to conserve cultural assets; and
- Take particular care to sustain and, where required, to enhance the biodiversity of the Region, its natural habitats, high quality landscapes and built heritage.

Developing a Regional Transportation System

Creating an upgraded and integrated transport system, built around the Regional Strategic Transport Network of the key transport corridors with their main public transport services providing the framework for future development is recognised as one of the key assets to accommodate growth. Strategic planning guidelines relating to the development of a Regional Transport System (RTS) are as follows:

- **SPG-TRAN 1:** To develop a Regional Strategic Transport Network (RSTN), based on Key Transport Corridors (KTCs), to enhance accessibility to regional facilities and services. Two major roads within the Borough are identified in the RDS as part of the Key Transport Corridors in Northern Ireland: -
- A4 Dungannon - Fivemiletown Road: The South Western Corridor; and
- A5 Aughnacloy - Omagh Road: The Western Corridor.
- In addition, the A29 Cookstown to Moy Road is identified as part of one of three additional Link Corridors in the RTS.

- **SPG-TRAN 2:** To extend travel choice for all sections of the community by enhancing public transport. Including the strengthening of the regional bus network (including the promotion of public transport routes and Park and Ride schemes) and the regional rail system;

- **SPG-TRAN 3:** To integrate land use and transportation to provide a much better range of travel choices for all, and reduce the demand for travel; and

- **SPG-TRAN 4:** To change the regional travel culture and contribute to healthier lifestyles, such as giving greater priority to encouraging more walking and cycling.

8 Climate Change Strategies

N/A

9 Implementation of Action Plans

There are two Action Plans pending for the AQMA's at Lurgan Road, Craigavon; and Flush Place, Portadown. Craigavon Borough Council are currently engaged in the consultation process with their AQMA stakeholder committee members and will be producing the necessary Action Plans by the end of June 2013.

10 Conclusions and Proposed Actions

Monitoring at 7 locations within Craigavon Borough Council's area has demonstrated that there are no sites were NO_2 levels exceeded the objective limit of 40µg/m^3. Craigavon Borough Council is now in the process of delivering an Action Plan for the AQMA's at Lurgan Road (Portadown) and Flush Place (Lurgan) where the NO_2 objective was exceeded in 2010. This detailed assessment was highlighted in the Progress Report for 2011.

However, the Updating and Screening Assessment for 2012 and this Progress Report (2013) have shown that the air quality objective was not breached at Lurgan Road (Portadown) & Flush Place (Lurgan) in the last two consecutive years (2011 and 2012) where there are currently AQMA's in situ. Whilst Craigavon Borough Council has the option of proposing a revocation of these AQMA's, it has been decided to continue diffusion tube monitoring at these sites for a further year to verify if the pollution levels will continue to remain below the objective level of 40 µg/m^3. A decision on the revocation of one or both of these AQMA's will be highlighted in the Council's Progress Report in April 2014.

No other pollutants were assessed to have an impact on air quality within the borough at this time.

11 References

Local Air Quality Management Technical Guidance – LAQM.TG(09)

Appendices

Appendix A: QA/QC Data

Appendix B: Diffusion Tube Monitoring Maps

Appendix C: 2012 NO_2 Diffusion Tube Monitoring Data

Appendix C: Craigavon AQMA Maps

Appendix A: QA:QC Data

Diffusion Tube Bias Adjustment Factors

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PM Monitoring Adjustment

N/A

Short-term to Long-term Data adjustment

N/A

QA/QC of automatic monitoring

N/A

QA/QC of diffusion tube monitoring

See table below

Table 1: Laboratory summary performance for WASP NO_2 PT rounds 111 - 118

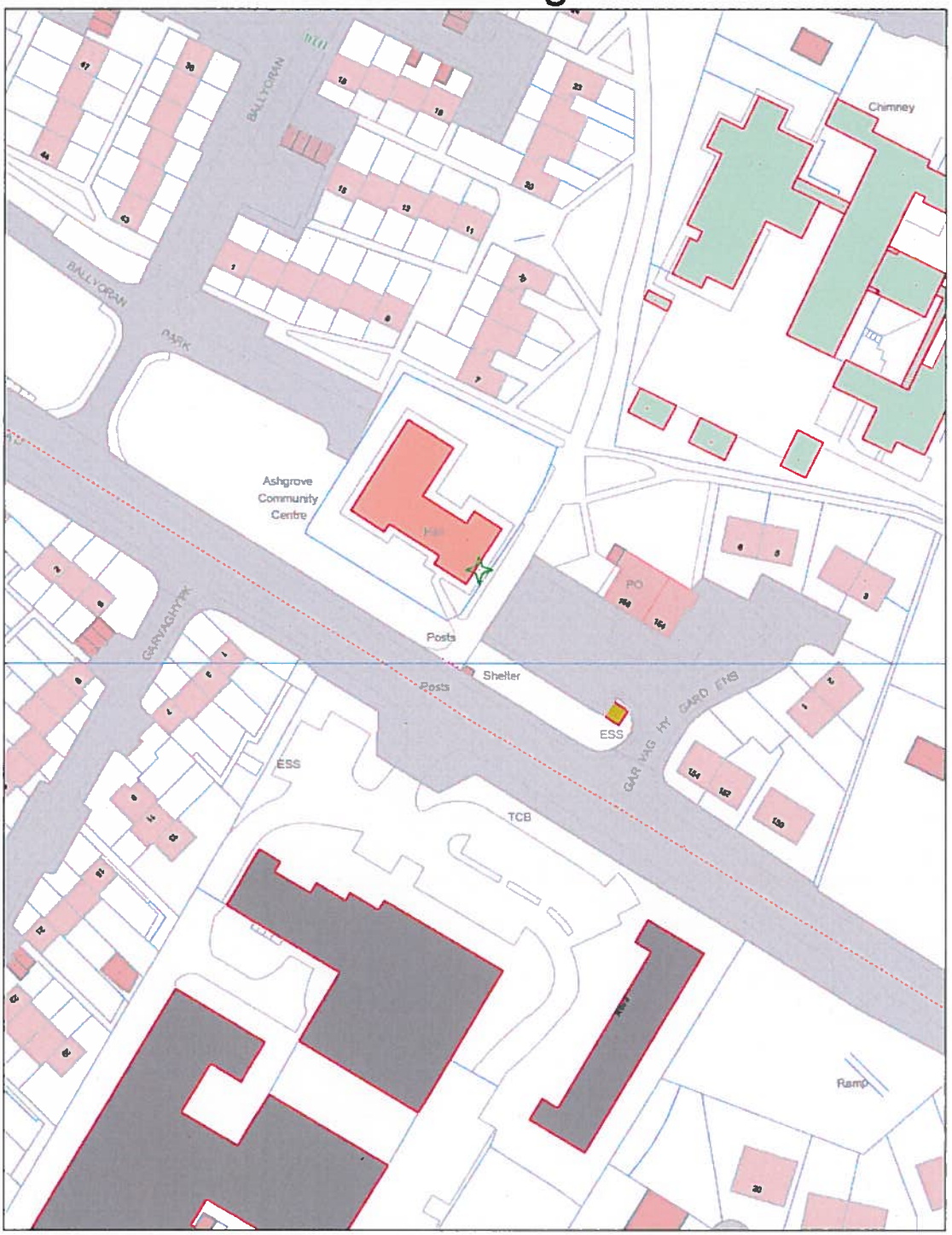
The following table lists those UK laboratories undertaking LAQM activities that have participated in recent HSL WASP NO_2 PT rounds and the percentage (%) of results submitted which were subsequently determined to be **satisfactory** based upon a z-score of □□± 2 as defined above.

WASP Round	**WASP R111**	**WASP R112**	**WASP R113**	**WASP R114**	**WASP R115**	**WASP R116**	**WASP R117**	**WASP R118**
Round conducted in the period	October – December 2010	January - March 2011	April - June 2011	July - September 2011	October - December 2011	January – March 2012	April – June 2012	July – September 2012
Aberdeen Scientific Services	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Bristol City Council [6]	100 %	100 %	100 %	100 %	100 %	-	-	-
Cardiff Scientific Services	75 %	100 %	100 %	100 %	75 %	100 %	100 %	100 %
Edinburgh Scientific Services	100 %	100 %	100 %	100 %	0 %	100 %	100 %	100 %
Environmental Services Group, Didcot (formerly Bureau Veritas Laboratories, Glasgow and Harwell Scientifics) [1] [2]	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Exova (formerly Clyde Analytical)	100 %	100 %	100 %	0 %	75 %	0 %	0 %	100 %
Glasgow Scientific Services	100 %	100 %	100 %	100 %	100 %	100 %	50 %	100 %
Gradko International [2]	100 %	100 %	100 %	100 %	37.5 %	100 %	100 %	100 %
Kent Scientific Services	100 %	50 %	100 %	100 %	75 %	75 %	100 %	75 %
Kirklees MBC	0 %	100 %	0 %	0 %	50 %	100 %	100 %	75 %
Lambeth Scientific Services	100 %	50 %	25 %	100 %	25 %	75 %	100 %	0 %
Lancashire County Analysts [3]	100 %	75 %	-	-	-	-	-	-
Milton Keynes Council	100 %	100 %	75 %	100 %	100 %	100 %	100 %	75 %
Northampton Borough Council	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Somerset Scientific Services [4]	-	-	-	-	100 %	100 %	100 %	100 %
South Yorkshire Air Quality Samplers	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Staffordshire County Council	100 %	100 %	100 %	100 %	100 %	100 %	100 %	75 %
Tayside Scientific Services (formerly Dundee CC)	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Walsall MBC [5]	100 %	-	-	-	-	-	-	-
West Yorkshire Analytical Services	100 %	75 %	75 %	100 %	100 %	75 %	75 %	50 %

[1] Bureau Veritas laboratory and Harwell Scientific now part of ESG Group.
[2] Participant subscribes to two sets of test samples (2 x 4 test samples) in each WASP PT round.
[3] No longer involved in NO_2 diffusion tube measurements from R113.
[4] New participant from R115.
[5] No longer involved in NO_2 diffusion tube measurements from R112.
[6] No longer involved in NO_2 diffusion tube measurements from R116.

APPENDIX B
Diffusion Tube Monitoring Maps

Air Monitoring Site



Date: 13/05/2009 Scale: 1:1250

CRAIGAVON Borough Council

✧ Ashgrove Community Centre, Portadown
Nitrogen Dioxide
Diffusion Tube No. 82764

ORDNANCE SURVEY® OF NORTHERN IRELAND

Air Monitoring Sites

Date: 13/05/2009 Scale: 1:1250

CRAIGAVON Borough Council

36 Ardboe Drive, Lurgan
Nitrogen Dioxide
Tube No. 82762

ORDNANCE SURVEY® OF NORTHERN IRELAND

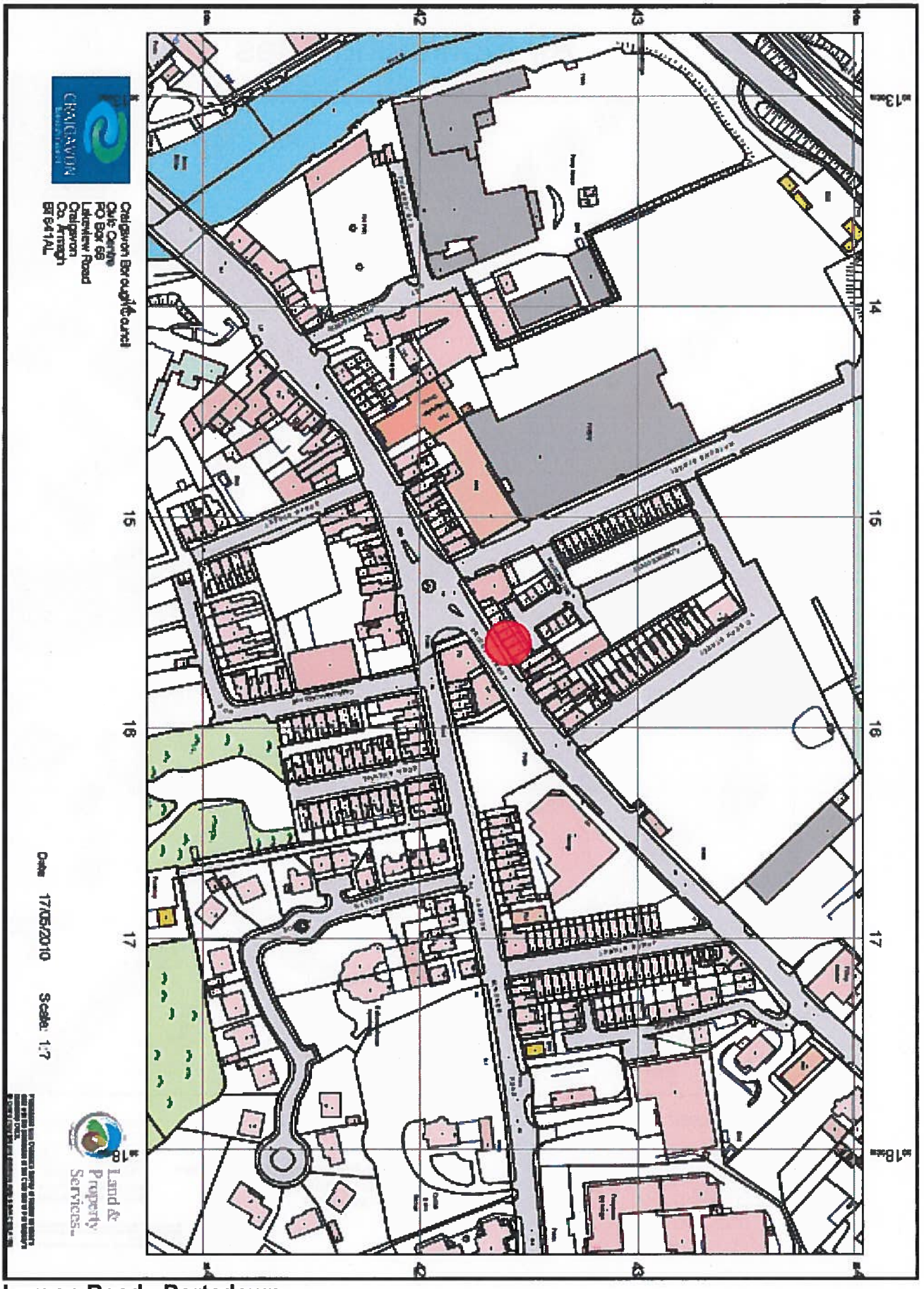
Air Monitoring Sites

Date: 13/05/2009 Scale: 1:1250

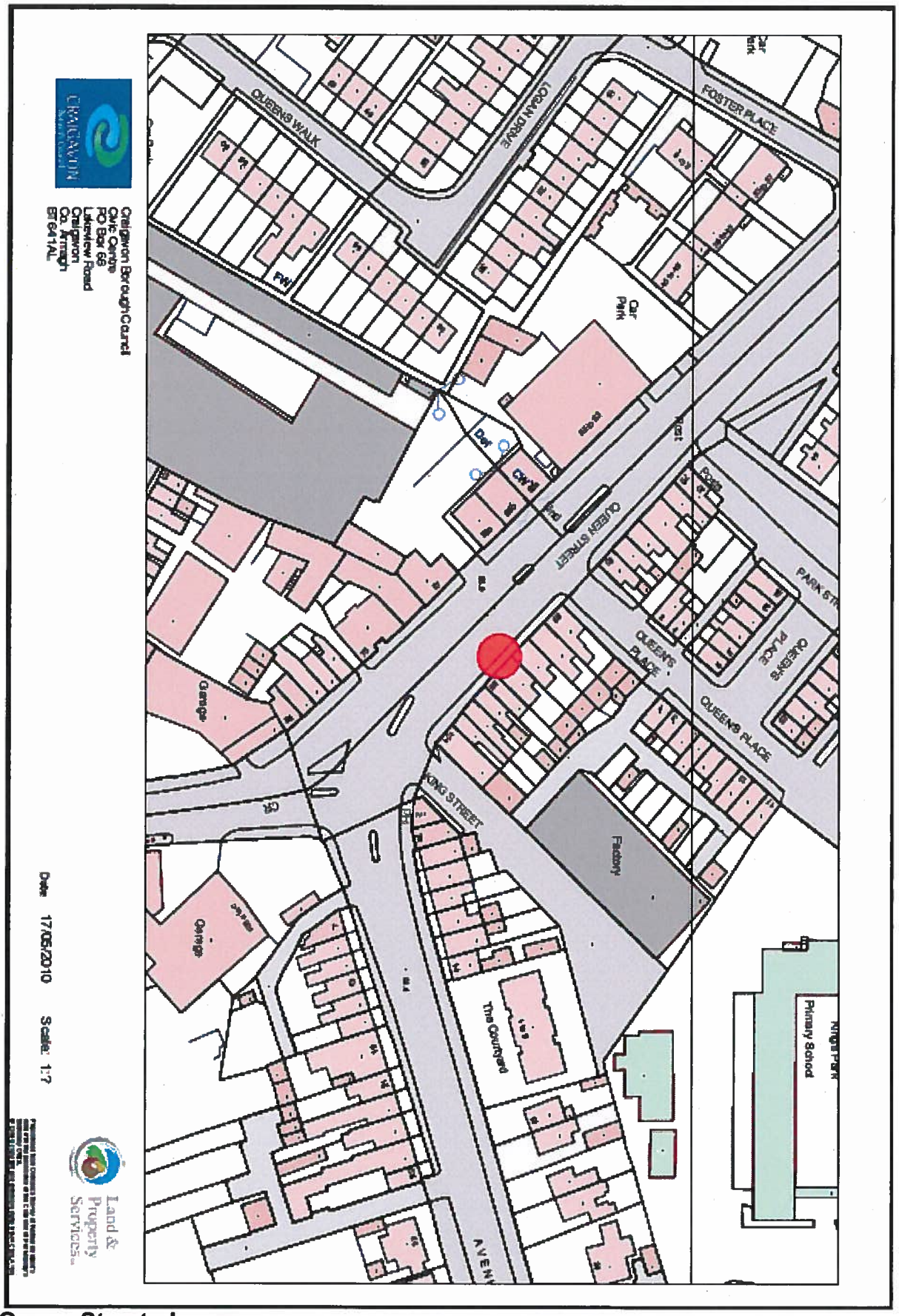
CRAIGAVON Borough Council

27 Ballyhannon Road, Portadown
Nitrogen Dioxide
Tube No.82763

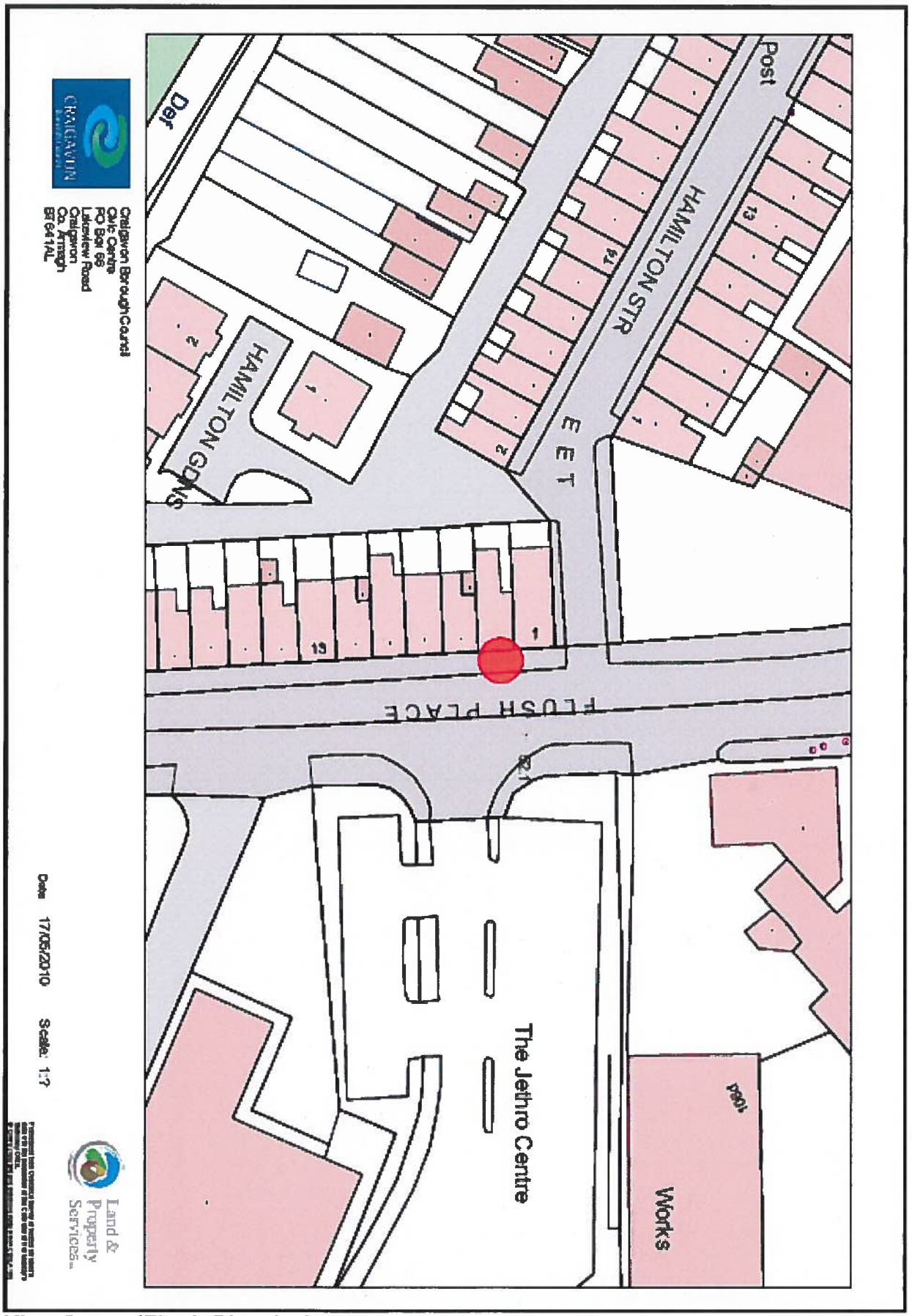
ORDNANCE SURVEY® OF NORTHERN IRELAND



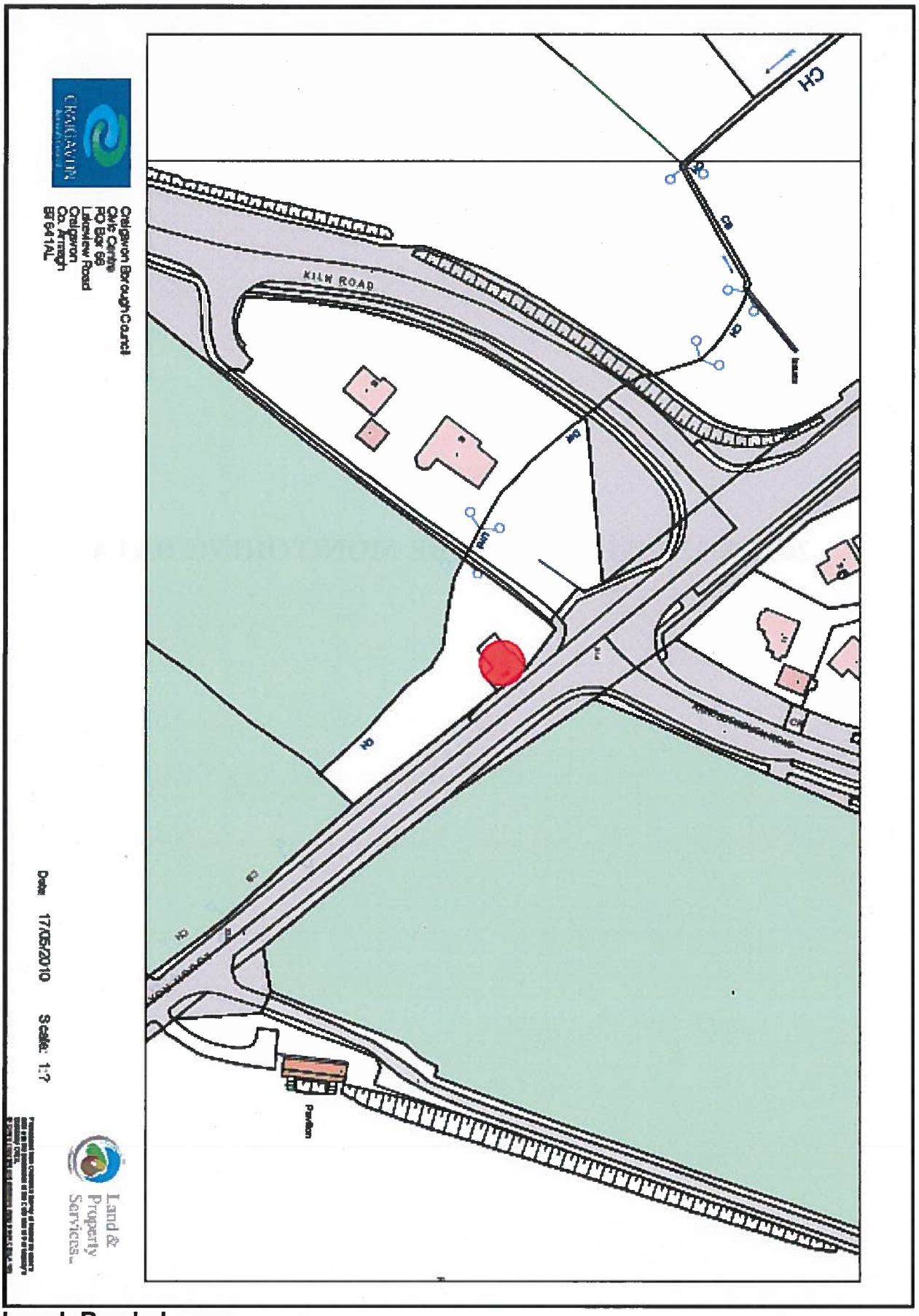
Lurgan Road - Portadown



Queen Street - Lurgan



King Street (Flush Place) - Lurgan



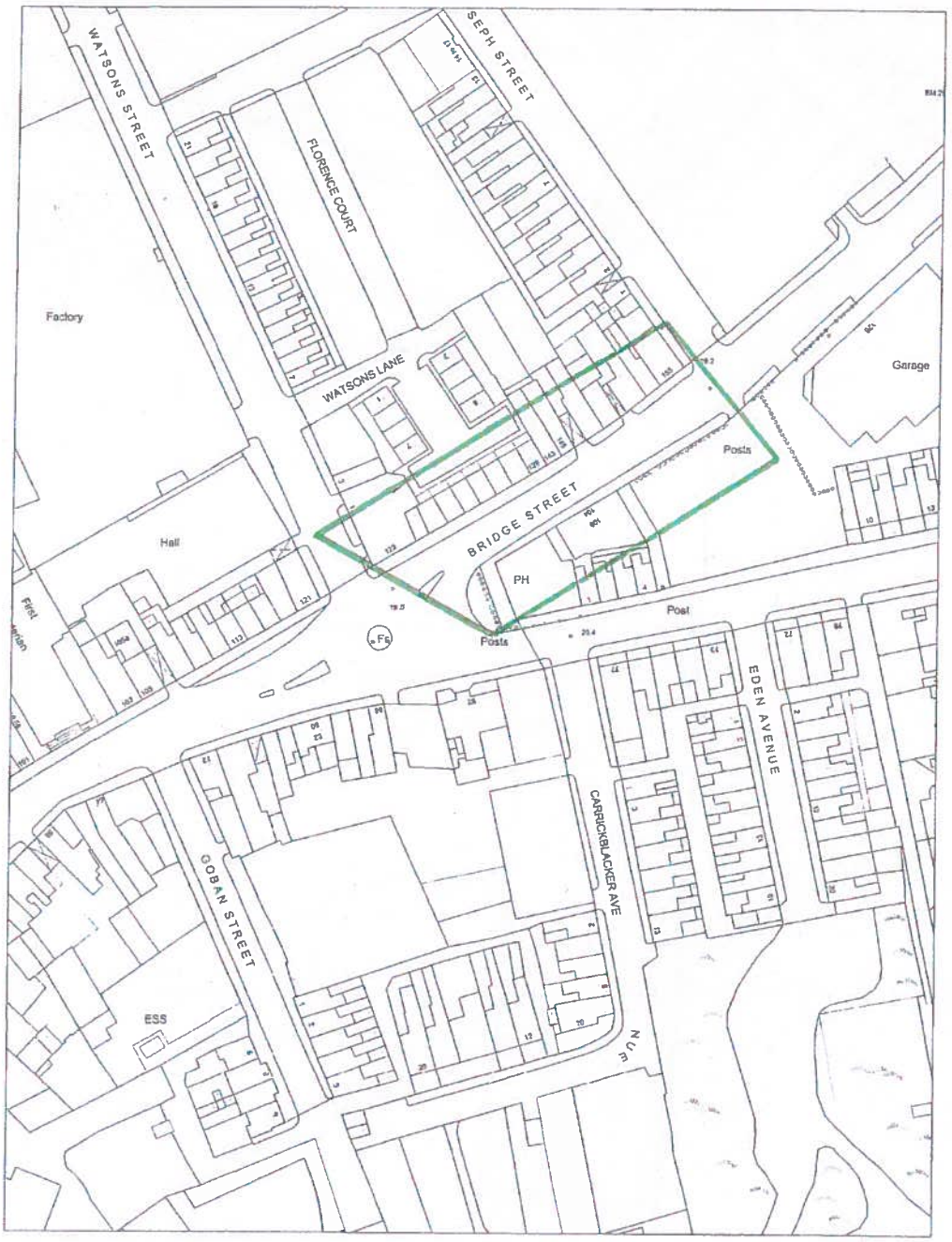
Lough Road - Lurgan

APPENDIX C

2012 NO2 DIFFUSION TUBE MONITORING DATA

NO2 DIFFUSION TUBE RESULTS 2012 (µg/m^3)							
	Ashgrove CC	Lurgan Rd (P'down)	Ballyhannon	Ardboe Drive	Queen St	Flush Place	Lough Rd
JANUARY	20	51	13	15	38	55	50
FEBRUARY	20	56	14	17	36	57	55
MARCH	15	48	12	13	33	50	51
APRIL	10	52	11	11	44	45	43
MAY	11	43	9	9	40	38	40
JUNE	11	39	8	8	38	41	37
JULY	9	37	8	7	28	36	33
AUGUST	-	34	6	6	29	37	40
SEPTEMBER	11	56	10	9	31	49	35
OCTOBER	16	54	13	15	44	56	50
NOVEMBER	20	64	17	22	50	62	55
DECEMBER	18	57	14	17	46	60	58
AVERAGE	15	49	11	12	38	49	46
Adjusted Ave	12	39	9	10	30	39	36

Appendix D : Craigavon AQMA Maps



Date: 01/12/2011 Scale: 1:1250

Craigavon Borough Council
Civic Centre
PO Box 66
Lakeview Road
Craigavon
Co. Armagh
BT64 1AL

CRAIGAVON Borough Council

ORDNANCE SURVEY OF NORTHERN IRELAND


QUEEN STREET
QUEEN PLACE
Factory
The Courtyard
AVENUE ROAD
KING STREET
PH
CR
Garage
Garage
Post
HAMILTON STR
EET
Works
The Jethro Centre
Hall
FLUSH PLACE
HAMILTON GDNS
Def
Flush
Retail
Park
Def
Ln
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