

Transport and Environment Committee

10.00 am, Tuesday, 26 August 2014

Environmental Noise Action Plan Update

Item number	7.12
Report number	
Executive/routine	Executive
Wards:	All Wards

Executive summary

The Environmental Noise (Scotland) Regulations 2006 implement the European Noise Directive 2002/49/EC, and describe a two stage process to manage environmental noise. The first stage, being the production of strategic noise maps and the second, being the production and implementation of Action Plans. This process is repeated every five years (rounds).

The Edinburgh Noise Action Plan was published and consulted upon by the Scottish Government in 2008. The area covered by the Action Plan comprises the following local authorities; City of Edinburgh, Midlothian and East Lothian. The purpose of the Action Plan is to reduce the number of people exposed to high levels of environmental noise. A report was presented to the previous Transport, Infrastructure and Environment Committee, in 2008, which supported the Draft Noise Action Plan.

In Edinburgh, three proposed Noise Management Areas and 10 proposed Quiet Areas have been identified by the Edinburgh Working Group, following the round 1 noise mapping process. Committee is asked to support these recommended areas so that the Scottish Government and Scottish Ministers can be informed. Round 2 fieldwork is being undertaken currently and will be reported to Committee once complete.

Links

Coalition pledges CP48

Council outcomes CO22

Single Outcome Agreement SO2

Environmental Noise Action Plan Update

Recommendations

It is recommended that the Transport and Environment Committee:

- 1.1 Approves the three Noise Management Areas and 10 Quiet Areas recommended by the Edinburgh Working Group in relation to round one of the noise mapping process; and
- 1.2 Notes that the second round of noise mapping has begun, and an update will be provided to Committee once this work is complete at the end of August 2014.

Background

- 2.1 Noise Action Planning is a Scottish Government led initiative and was developed to support the adoption of EC Directive 2002/49/EC. The Scottish Government transposed this Directive into legislation, the Environmental Noise (Scotland) Regulations 2006.
- 2.2 The Environmental Noise (Scotland) Regulations 2006 describe a two stage process to manage environmental noise. The first stage is to produce strategic Noise Maps, developed by consultants on behalf of the Scottish Government, and the second to produce and implement Noise Action Plans. The Action Plans aim to reduce noise levels where necessary, and to preserve environmental noise quality where it is high.
- 2.3 The first Noise Action Plan was submitted to the previous Transport, Infrastructure and Environment Committee on 29 July 2008.
- 2.4 To produce the Noise Action Plan, the Scottish Government set up the Scottish Environmental Noise Steering Group. Underneath this, a Working Group specifically for the Edinburgh Noise Action Plan area (comprising City of Edinburgh Local Authority area and boundary areas of Midlothian and East Lothian Local Authorities) has also been established. This Working Group consists of acoustic consultants employed by the Scottish Government, officers from the Council's Noise Team, Planning Service and Transport Service.
- 2.5 The Edinburgh Working Group produced a Noise Action Plan which identified Candidate Noise Management Areas (CNMAs) and Candidate Quiet Areas (CQAs).

- 2.6 The methodology for the identification of CNMAs is based upon identifying areas of loud noise levels on the Strategic Noise Maps and, through fieldwork, combining these with areas of high population density then making an adjustment for the annoyance attributable to the noise source and level. The methodology for the identification of CQAs is developed from guidance given by the Department for Environment, Food and Rural Affairs (DEFRA) and is based upon the identification of areas of low noise on the Strategic Maps and combining this with a minimum area covered.
- 2.7 Following this fieldwork and assessment, the Council designates the Noise Management Areas (NMAs) and Quiet Areas (QAs).
- 2.8 The Scottish Government is required to update the noise maps every five years, and Local Authorities have been requested to participate in this process. Members of the Noise Team, Planning and Transport within Services for Communities are currently involved in updating the noise maps for round 2. Whilst round 1 looked at roads with more than six million vehicle passages per year and agglomerations with a population of more than 250,000; round two looks at roads with more than three million vehicle passages per year and agglomerations with a population of more than 100,000. The process will be the same as round 1, with officers from the Council Noise Team carrying out fieldwork to confirm information provided in the Strategic Noise Maps.

Main report

Stage 1 – Strategic Noise Mapping

- 3.1 Strategic Noise Maps are based on assessment of noise exposure in a given area, due to different noise sources, or for overall predictions for such an area. The maps were created by acoustic consultants on behalf of the Scottish Government using specialised noise prediction modelling software. The data required for the calculation of noise levels have been determined by consultation with various organisations including Transport Scotland, Scottish Environment Protection Agency (SEPA), Network Rail, British Airports Authority and Local Authorities.
- 3.2 In the first round of noise mapping, the Strategic Noise Maps identified 19 CNMAs and 22 CQAs within the Edinburgh Noise Action Plan Area.

Candidate Noise Management Areas (CNMAs)

- 3.3 Since the previous report to Committee in 2008, the methodology for the identification of CNMAs has been agreed by the Scottish Environmental Noise Steering Group. Strategic noise maps are produced by consultants on behalf of the Scottish Government and use modelled data to identify areas of loud noise levels and combine these with areas of high population density. An adjustment is then made for the annoyance attributable to the noise source and level.

3.4 The strategic noise maps identified 19 CNMAs in Edinburgh associated with road traffic noise (See map at Appendix 1). They are identified as:

Granton	Tollcross 1
Abbey Hill	Tollcross 2
Leith 1	Bridges
Leith 2	Southside
Leith 3	Old Town 1
Docks	Old Town 2
Roseburn	Broughton
Gorgie	Calton 1
Slateford	Calton 2
Grassmarket	

3.5 Subsequently, these candidate areas have been assessed by the Edinburgh Working Group. The scrutiny included field visits to each of the locations to assess the validity of data (noise levels, traffic counts, building positions etc.) used in the calculation that identified the candidate areas.

3.6 From this assessment, three of these candidate areas have been recommended for progression to full NMAs. The Edinburgh Action Plan aims to reduce noise levels in these areas where possible and to take them into consideration in future planning, transport and any other related decisions, such as those set out on paragraph 3.12 below. They are listed below (see also map at Appendix 1):

Tollcross 2;
Westport; and
Old Town 2.

3.7 The other CNMAs were discounted as the fieldwork identified that the modelled data provided in the Strategic Noise Maps did not reflect the measured data from the site visits. They will not be reconsidered in further rounds, unless future Strategic Noise Mapping modelling indicates this is necessary.

Candidate Quiet Areas (CQAs)

3.8 The methodology for the identification of the CQAs is developed from guidance given by the Department for Environment, Food and Rural Affairs (DEFRA) and is based upon the identification of predicted areas of low noise on the Strategic Noise Maps, produced by acoustic consultants on behalf of the Scottish Government.

3.9 The CQAs identified in the Plan have been subject to further scrutiny and tested against guidance produced by the Scottish Environmental Noise Steering Group (SENSG).

3.10 There were 22 CQAs identified in the area covered (Edinburgh, Midlothian and East Lothian), 16 of which are within the City of Edinburgh. These have also been assessed by Council's Noise Team as part of the Edinburgh Working Group.

3.11 Ten CQAs within the City of Edinburgh Council boundary have been recommended for progression to full QAs by the Edinburgh Working Group, as they meet the technical guidance as set out by DEFRA. The main parameters were that the areas were a minimum of 9 hectares and at least 75% of the area is subject to noise levels not exceeding 55dB L_{DAY}. The ten CQAs are at the following locations (see also Appendix 2):

QA2	Inverleith Park	QA16	Colinton Dell
QA3	Royal Botanic Gardens	QA17	Easter Craiglockhart
QA4	Lochend Park	QA18	Colinton Mains Park
QA5	Holyrood Park	QA20	Ancient woodlands Mortonhall
QA15	Hailes Park	QA21	Hermitage of Braid

3.12 If Committee support these 10 CQA's being submitted to the Scottish Government, any future actions or decision making which could impact on environmental noise, will need to take into consideration that these are QAs and this needs to be preserved. The Edinburgh Noise Action Plans Objectives (Agreed by the Transport, Infrastructure and Environment Committee on 29 July 2008) are:

- a. On a prioritised basis, by 2018 we aim to reduce the exposure to environmental noise in NMAs;
- b. By 2018, we will incorporate environmental noise management within all stages of the planning process including transportation planning, design, construction and maintenance activities as appropriate;
- c. By 2018, we will endeavour to demonstrate a practical contribution to noise reduction via existing and future proposals and policies; and
- d. By 2018, we will promote channels of communication to stakeholders that encourage a learning environment.

Round 2 – Updated Strategic Noise Mapping

3.13 As the Scottish Government requires the strategic noise mapping to be updated every five years, the second round of noise mapping has already started and further CNMAs and CQAs will be considered, and will be assessed as per the guidance. A report will be provided to Committee on the outcome of round 2 when this fieldwork is complete, and proposals put forward by the Edinburgh

Working Group. These areas are in addition to the NMAs and the QAs identified as part of round 1.

- 3.14 The fieldwork for round 2 will be completed by the end of August 2014. Subsequently, a full and detailed report will be presented to this Committee explaining the process and outcomes of the fieldwork.

Measures of success

- 4.1 Noise, Planning and Transport Services in Services for Communities have a more joined up approach and environmental noise is given greater consideration in relation to future planning and transport policy.

Financial impact

- 5.1 The report does not have any financial implications. However, once developed and if agreed, individual actions may result in costs that would have to be contained within existing budgets.

Risk, policy, compliance and governance impact

- 6.1 The impacts of this report have been considered in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties. Relevant Council sustainable development policies have also been taken into account.

Equalities impact

- 7.1 This report proposes no change to current policies or procedures and as such a full impact assessment is not required. The contents have no relevance to the public sector Equality Duty of the Equality Act 2010.

Sustainability impact

- 8.1 This report presents the opportunity to control or reduce noise in the city which would have a positive environmental impact.

Consultation and engagement

- 9.1 The Scottish Government carried out a public consultation in 2008 on the draft Edinburgh Action Plan. Internal consultation has taken place with Transport and Planning services. In addition, the Scottish Government carried out a similar public consultation exercise in relation to round 2 of the process.

Background reading / external references

[Item 10 - Environmental Noise Action Plans - Transport, Infrastructure and Environment Committee 28 July 2008.](#)

Round 1 Noise Strategic Mapping - <http://www.scottishnoisemapping.org/public/action-planning.aspx>.

John Bury

Acting Director of Services for Communities

Contact: Kirsty Morrison, Community Safety Strategic Manager

E-mail: Kirsty.morrison@edinburgh.gov.uk | Tel: 0131 529 7266

Links

Coalition pledges	P48 – Use green flag and other strategies to preserve our green space
Council outcomes:	CO22 – Moving efficiently - Edinburgh has a transport system that improves connectivity and is green, healthy and accessible
Single Outcome Agreement:	SO2 - Edinburgh's citizens experience improved health and wellbeing, with reduced inequalities in health
Appendices	Appendix 1 – Edinburgh CNMAs Appendix 2 – Edinburgh CQAs

Transport and Environment Committee

10.00am, Tuesday, 26 August 2014

Trading Standards Primary Authority Partnership Arrangements

Item number	7.13
Report number	
Executive/routine	
Wards	

Executive summary

Trading Standards provide advice to businesses on how they should comply with trading standards and consumer protection legislation.

Primary Authority is a statutory scheme that allows eligible businesses to form legally recognised partnerships with a Trading Standards Service. Such arrangements allow businesses to demonstrate commitment to working with regulators to improve compliance with regulation.

The Primary Authority scheme is administered by The Better Regulation Delivery Office (BRDO) which is an independent unit within the UK Government's Department for Business, Innovation and Skills.

Primary Authority Partnership arrangements will allow the Edinburgh Trading Standards Service (ETSS) to offer 'assured' advice to businesses and trade organisations as to compliance with specified aspects of trading standards legislation. Advice given has legal status and provided it was followed would normally prevent another local authority raising legal proceedings on any such matter. Traditionally the cost of providing business advice is met from the general council budget. The cost for providing the service will be recovered as a specific fee from participating businesses.

Links

Coalition pledges	P28
Council outcomes	CO26
Single Outcome Agreement	SO1

Trading Standards Primary Authority Partnership Arrangements

Recommendations

It is recommended that the Committee:

- 1.1 notes that Edinburgh Trading Standards Service will set up suitable Primary Authority arrangements with businesses and trade organisations that are either based in Edinburgh or operate within Edinburgh;
- 1.2 agrees that this facility be promoted within Edinburgh and qualifying businesses be invited to negotiate appropriate arrangements; and
- 1.3 agrees that the businesses and trade organisations are charged on a cost recovery basis for the primary authority services supplied through the partnership.

Background

- 2.1 The Regulatory Enforcement and Sanctions Act 2008, as amended, establishes Primary Authority as a statutory scheme in which a business can choose to form a partnership with a local authority. This will affect the way in which they are regulated by all local authorities.
- 2.2 When the scheme was introduced in 2009 participation was limited to businesses regulated by more than one local authority. In September 2013 BRDO amended the Primary Authority Statutory Guidance to extend participation to include trade associations and franchisors that provide members and franchisees respectively with advice on compliance. It applies UK wide.
- 2.3 Businesses trading in more than one local authority area have sometimes raised concerns that varying interpretations of the law have been given by different authorities. Primary Authority Partnership arrangements are a way of offering compliance advice and legal interpretations that can be relied on by the business. Businesses following advice provided by the primary authority will then not be required to operate in varying ways by different local authorities.

- 3.1 The primary authority definitively informs the business as to their legal obligations and provides interpretation of applicable legislation. Such arrangements allow guidance to be given with regards to compliance systems and enable the Primary Authority to monitor the effective implementation of controls.
- 3.3 A business may have a direct partnership with its primary authority, or may be one of a group of businesses that has their partnerships co-ordinated by a third party, such as a trade association or franchisor.
- 3.4 A Primary Authority is able to produce an inspection plan, as a means of improving the targeting and focus of local checks on businesses and co-ordinate activity across the operations of a multi-site business, or across a group of businesses. All inspection plans are included in the Primary Authority database.
- 3.5 An inspection plan can address proactive, planned or programmed regulatory interventions that are within the scope of a partnership including;
- Inspections
 - Test purchases
 - Sampling visits
 - Other checks on compliance; and
 - Advisory visits

When undertaking proactive visits to a business the enforcing authority is required to follow inspection plans that are in place.

- 3.6 Advantages of Primary Authority arrangements are
- Advice to the business is 'assured' i.e. once implemented, the business can have confidence that it is compliant and that another regulator cannot require it to comply in a different way.
 - Enables collation of local intelligence and co-ordination of enforcement responses.
 - The Primary Authority is notified of all enforcement actions, and is under an obligation to respond to proposed action within five working days. The Primary Authority is able to direct against proposed action in certain circumstances.
 - The liability of a Primary Authority is legally limited by the terms of the Primary Authority Terms and Conditions.
 - Cost recovery allows local authority capacity to be supplemented to meet the needs of partnerships.

- 3.7 Primary Authority Partnerships would assist the Edinburgh Trading Standards Service by;
- a) allowing services to be improved and drive up standards of local companies; and
 - b) allowing full cost recovery.
- 3.8 Based on current expressions of interest four businesses may wish to enter into Primary Authority arrangements in the first year. Future uptake will depend upon the marketing and promotion of the scheme. It should be noted that there are currently only two existing Primary Authority Partnerships in Scotland, both with Glasgow Trading Standards Service.

Measures of success

- 4.1 Partnership working within Primary Authority arrangements resulting in increased business compliance with trading standards legislative requirements.
- 4.2 Improve standards and increase consumer confidence in Edinburgh businesses.

Financial impact

- 5.1 All Primary Authority services will be provided on a cost recovery basis but the exact level of fees are still to be identified. This will allow the Council to recover these costs for the first time as opposed to funding the cost from the general revenue account.

Risk, policy, compliance and governance impact

- 6.1 The main risk is that businesses may withdraw from the partnership arrangements resulting in a reduction of income. Edinburgh business could elect to seek this service from other local authorities if the Council does not provide Primary Authority advice.
- 6.2 Advice given under a Primary Authority arrangement would be covered by the Council's Professional Indemnity policy. If the annual fee income is greater than £200,000 the policy requires that the insurers be notified.
- 6.3 Policy – The recommendations do not impact on any existing policy of the Council.
- 6.4 Health & Safety, Governance, Compliance, Regulatory – there are no identified implications.

Equalities impact

- 7.1 The contents, analysis and recommendations neither contribute to, nor detract from, the delivery of the three Public Sector Equality Duties.
- 7.2 The contents, analysis or recommendations described in the report do not deliver any outcomes relating to the ten areas of rights, nor do they enhance or infringe upon them.

Sustainability impact

- 8.1 The need to build resilience to climate change impacts is not relevant to the proposals in this report because the proposals are neither positively nor negatively affected by climate change. The issues identified will have no impact as relating to the Climate Change (Scotland) Act 2009.
- 8.2 Social justice is not considered to impact on the proposals in this report because the proposals do not change social conditions.

Consultation and engagement

- 9.1 Initial consultation and engagement has been undertaken between ETSS and two companies based in Edinburgh who operate UK wide. Also initial consultation has been undertaken with two trade organisations based in Edinburgh who are responsible for members throughout Scotland.
- 9.2 Further in-depth consultation will be required with the businesses and trade organisations if the recommendations are approved.
- 9.3 Engagement with other businesses, either based in or operating within Edinburgh, may be necessary in the future.

Background reading / external references

N/A

John Bury

Acting Director of Services for Communities

Contact: Susan Mooney

E-mail: susan.mooney@edinburgh.gov.uk | Tel: 0131 529 7587

Contact: Colin Baxter

E-mail: colin.baxter@edinburgh.gov.uk | Tel: 0131 469 5440

Links

Coalition pledges	P28 - Further strengthen our links with the business community by developing and implementing strategies to promote and protect the economic well being of the city
Council outcomes	CO26 - The Council engages with stakeholders and works in partnership to improve services and deliver on agreed objectives
Single Outcome Agreement	SO1 - Edinburgh's Economy Delivers increased investment, jobs and opportunities for all
Appendices	n/a

Transport and Environment Committee

10.00am, Tuesday, 26 August 2014

Public Utility Company Performance 2013/14

Item number	7.14
Report number	
Executive	
Wards	All

Executive summary

This report summarises the performance of Public Utility Companies (PUs) during the period April 2013 to March 2014 (Quarters 1 to 4), for the 2013/14 financial year.

It summarises and compares the four quarters of the year and shows trend information from previous years.

The report comments on the performance and progress of the Roadwork Support Team (RST) including the additional Inspectors, employed on a two year fixed term contract, to allow the Council to inspect of 100% of PU reinstatements.

The report will also detail the proposals for managing PU performance for 2014/15.

Coalition pledges	P28 and P33
Council outcomes	CO19 and CO26
Single Outcome Agreement	SO4

Public Utility Company Performance 2013/14

Recommendations

- 1.1 It is recommended that the Transport and Environment Committee notes:
 - 1.1.1 the report and performance information shown in Appendix A, including the arrangements for securing an improved performance level from all Public Utilities;
 - 1.1.2 that future quarterly reports provided to this Committee will include information on the progress of the revised Edinburgh Road Works Ahead Agreement (ERWAA); and
 - 1.1.3 that future quarterly reports will include progress on the Improvement Plans requested from Public Utilities.

Background

- 2.1 The New Roads and Street Works Act 1991, as amended by the Transport (Scotland) Act 2005, gives statutory undertakers (Public Utility (PU) companies and private utility providers) responsibility for signing, lighting and guarding road works. The legislation also requires the road to be reinstated to prescribed standards upon completion of works.
- 2.2 A previous report to this Committee on 15 January 2013, recommended that a PU Performance Report be submitted on a quarterly basis and approved the recommendation to instruct the Head of Transport, to enhance the scrutiny and monitoring of all road works. The Committee also agreed to instruct the Head of Transport to take the lead in developing a revived Edinburgh Road Works Ahead Agreement (ERWAA).
- 2.3 This report provides an update on developments that have occurred during the year April 2013 to March 2014.

Performance

- 3.1 The performance of each PU is monitored daily by the Roadworks Support Team (RST), with reports compiled on a monthly and quarterly basis. The result of this monitoring is discussed at bi-monthly liaison meetings held with each PU, on a one to one basis.
- 3.2 Where a PU fails to meet the specified performance standards, as defined in the appropriate Code of Practice, the following staged procedure should be used:
- The roadworks authority issues a Notice of Failure to Achieve Performance (NFAP).
 - The undertaker responds with an Improvement Plan – Stage 1.
- 3.3 In the event that the PU does not achieve the required level of improvement, then:
- the roadworks authority issues an Improvement Notice (IN); and
 - the PU responds with an Improvement Plan – Stage 2.
- 3.4 Within 5 days of receiving the NFAP, the PU must verify and analyse the defect data (gathered from inspections, performance information), to establish appropriate improvement objectives. It should then prepare an outline Improvement Plan designed to achieve the objectives and forward this to the roadworks authority.
- 3.5 Where this is considered not to be the case, an Improvement Notice/Stage 2 Improvement Plan shall be triggered.
- 3.6 Following implementation of the Improvement Plan, if it becomes clear after three months that no practical improvement is being achieved, other measures may need to be considered such as:
- Escalation of the Improvement Plan monitoring to achieve a step change in performance;
 - Involvement of a more senior level of management within both the PU and the roadworks authority;
 - Following an appropriate grievance and dispute process, civil and/or criminal remedies; and
 - A report containing any relevant evidence of the undertaker's failure to comply with their duties under the Act, may be submitted to the Office of the Scottish Road Works Commissioner for information.

Inspections

- 3.7 The New Roads and Street Works Act 1991, as amended by the Transport (Scotland) Act 2005, makes PUs wholly responsible for the management of their road works. Councils, as Roads Authorities, are responsible for monitoring the performance of the PUs and are empowered to charge them for a number of sample inspections carried out to monitor the performance. The sample size that is currently chargeable is 30% of the total annual number of re-instatements. Other inspections, carried out routinely by the Roads Authority or in response to reports from the police or members of the public, may also be carried out. The cost of these falls to the Council unless a defect is found.
- 3.8 The two areas that are inspected and monitored closely are PU reinstatements and PU defective apparatus (manholes, toby covers, valve and inspection/access covers).
- 3.9 Target inspections are all other inspections carried out, (excluding Sample Inspections). They involve the Council investigating all other reinstatements, new reinstatements or those still within their two year guarantee period. The breakdown of the type of inspections carried out is shown in Table 3.9A in Appendix A. The average failure rate for PUs is shown in Table 3.9B in Appendix A.

Sample Inspections

- 3.10 The total number of sample inspections carried out in 2013/14 was 1,877. The breakdown between each inspection type is shown in Table 3.9A in Appendix A.
- 3.11 The percentage pass rate for each PU at the end of 2013/14, and over the past four years, is shown in Table 3.11 and Graph 3.11 in Appendix A. The target pass rate for all PUs is 90%.

Target Inspections

- 3.12 The cumulative number of target inspections carried out in 2013/14, was 10,766. The breakdown between each inspection type is shown in Table 3.9A in Appendix A.
- 3.13 The total number of all inspections carried out in 2013/14 was 26,963. The number of inspections carried out, compared with the last four years are shown in Graph 3.13 in Appendix A.

From analysing the 26,963 inspections carried out, the average failure rate for reinstatements inspected was 12.8% against a target of 10%. See Table 3.9B in Appendix A.

3.14 The number of inspections carried out last year shows a 105% increase, from the number carried out in the previous year. This is the result of employing an additional two inspectors. When compared with 2012/13, the increase in the number of inspections has resulted in an 89.6% increase in identified reinstatement failures. The number of inspections carried out each month, during 2013/14, is shown in Graph 3.15 in Appendix A.

Utility Defective Apparatus

- 3.15 The total numbers of outstanding defective apparatus at the end of 2013/14 was 553. A breakdown for each PU is shown in Table 3.16 in Appendix A. There was an improvement of 20.1% when compared to the same period in 2012/13.
- 3.16 The PU with the largest numbers of defective apparatus continues to be Scottish Water, with 470 items. Scottish Water has only improved by 1.5% since Q3. An improvement will be required within a set timescale, to be agreed with Scottish Water.
- 3.17 When comparing the outstanding numbers in 2013/14 to 2012/13, improvement was relatively small, with the exception of Scottish Water. However, each PU has made a significant improvement in its performance when comparing the numbers in 2011/12 and 2013/14. Openreach and Scottish Water had the largest number of outstanding items of defective apparatus at the end of last year. The comparison over the previous four years is shown in Table 3.18 and Graphs 3.18A and 3.18B in Appendix A.

Utility Defective Reinstatements

- 3.18 Every PU has seen an increase in the number of outstanding defects since Q1. A breakdown for each PU is shown in Table 3.19 and Graph 3.19 in Appendix A. At the end of Q4, the total number of outstanding defective reinstatements in Edinburgh was 637. Scottish Water continues to be the PU with the largest number of defective reinstatements, followed by Scottish Gas Networks (SGN). These defects are discussed at the bi-monthly liaison meetings.
- 3.19 The increase in the number of inspections as discussed in 3.14 (13,129 in 2012/13 compared to 26,963 in 2013/14) has had a direct affect on the number of failed reinstatements identified. Had the additional inspections not been carried out, there was a real possibility that these defects would have not been found and the responsibility for their repair would have fallen to the Council after the end of their guarantee period.

Registration & Fixed Penalty Notices (FPNs)

- 3.20 All road works on public roads must be registered on the Scottish Road Works Register (SRWR).

- 3.21 PUs are required to record all information relating to the works they wish to undertake and works that are underway. Roads Authorities are also required to record all information on works they wish to carry out. Developers, and others wishing to occupy or carry out works on public roads, must first obtain consents (Road Occupation Permits) from roads authorities, which are then responsible for the registration of these works.
- 3.22 The comparison of registration failures is shown in Graphs 3.23A and 3.23B in Appendix A.
- 3.23 Failure to comply with the above requirements is an offence. PUs and those working under Road Occupation Permits that commit such an offence, can discharge their liability through the payment of a Fixed Penalty Notice (FPN). Currently the Penalty is £120, which is reduced to £80 if paid within 29 days. A breakdown of FPNs issued in 2013/14 is shown in Graphs 3.24A and 3.24B in Appendix A
- 3.24 The total number of FPNs accepted by PUs, in 2013/14 was 534. A further 280 FPNs were accepted by other agents in relation to Road Occupation Permits eg skips, scaffolding, etc.

The Edinburgh Road Works Ahead Agreement (ERWAA)

- 3.25 A report outlining the new working arrangements for the ERWAA was submitted to and approved by, the Transport and Environment Committee on 18 March 2014.
- 3.26 A consultation exercise was carried out and a small number of responses were received from Community Councils.
- 3.27 A meeting took place on 4 April 2014 with the chair of the Scottish Joint Utilities Group (SJUG), to discuss the concerns raised by PUs, concerning the wording of certain parts of the Agreement and the additional costs that may be incurred in implementing parts of the revised ERWAA. It was agreed at this meeting that the wording within the Agreement would be reviewed, to satisfy both the PUs and the Council. The revised ERWAA will be discussed at an Officer/Member Working Group. Once agreed, the Agreement will be amended and reported to this Committee.

Actions

Improvement Plan – Scottish Water

- 3.28 Several meetings have been held with Scottish Water throughout last year, to discuss its Improvement Plan. As can be seen by the number of outstanding defective apparatus failures, taken from the SRWR, Scottish Water's performance did improve slightly, however a significant number of outstanding defects remain.

- 3.29 Scottish Water have given assurances that the issue of duplicate registrations is being addressed, through additional staff training. However delivery of this training has made no measurable difference to its performance.
- 3.30 Discussions have been held with Scottish Water at a senior level to discuss its recent performance. It has been agreed that improvement targets will be set against its performance which will be regularly assessed. The monitoring of this performance will now form the major part of the liaison meetings, with results being reported, on a monthly basis, to the Road Services Management Team.

Proposals for the coming year

- 3.31 It is intended to invite and commence liaison meetings with smaller PUs (O2 UK Ltd, Vodafone, EE, Network Rail and Concept Solutions People). Presently, only the five main PUs (Scottish Water, Scottish Power, Scotland Gas Networks, Openreach and Virgin Media) are invited to and attend Liaison meetings.
- 3.32 The performance of each PU during 2013/14 will be discussed at their liaison meetings. A request will be made for Improvement Plans from each PU where performance has not improved over the last three quarters of last year. A timescale will be given to each PU, in which a marked improvement in its performance must be made. Results from these meetings will be reported to this Committee.
- 3.33 It is intended to investigate specific reinstatements carried out by PUs where concerns have been raised by Road Services staff or members of the public. Locations investigated for coring will be identified and cored, even if a surface inspection appears satisfactory. This will enable the Roadworks Support Team (RST) to be specific in their investigations, of suspected specification failures. Members of the public can report concerns to their Local Neighbourhood office or through Clarence.

Performance Monitoring

- 3.34 The figures and graphs referred to throughout this report are shown in Appendix A. This appendix provides performance information for 2013/14 and trend information covering the last three years.

Measures of success

- 4.1 Improved performance in the key areas reported and success will be measured by greater public satisfaction with:
- the planning, co-ordination and delivery of road works across the city;
 - the quality of information supplied to people who live in, work in or visit Edinburgh; and
 - the quality and longevity of PU reinstatements.

- 4.2 Public satisfaction will be measured at the end of each year by targeting Community Councils with customer questionnaires. It is anticipated that this will be undertaken in August 2014.

Financial impact

- 5.1 The revenue streams associated with Sample and repeat inspections of failed PU reinstatements, exceeded the budget target of £230,276 for 2013/14 financial year. The total revenue achieved was £240,960.
- 5.2 The cost of employing the additional Inspectors is currently offset by the revenue received from the visits made to check for compliance.

Risk, policy, compliance and governance impact

- 6.1 There is a risk of the condition of the road network deteriorating if the 100% inspection of all PU reinstatements is not maintained. Should 100% of inspections not be undertaken, there is a risk that any defects would not be found. The responsibility for their repair would fall to the Council at the end of their guarantee period.
- 6.2 Where the Council has made significant investment in road improvements, there is a risk that the road network may deteriorate, following reinstatements that have not been carried out to the agreed standards.
- 6.3 There a risk of reduced revenue, if the number of inspections is less than that estimated at the beginning of the year.
- 6.4 There is a risk of lack of improvement by poorer performing PUs. This can be addressed by the use of formal Improvement Plans, as specified in Code of Practice for Co-ordination of Works in Roads.

Equalities impact

- 7.1 There are no equalities impacts arising from this report.

Sustainability impact

- 8.1 There are no sustainability impacts arising from this report.

Consultation and engagement

- 9.1 Individual Liaison meetings are held every two months with representatives from all of the major PUs. Specific performance issues and improvement requirements are discussed at these meetings.
- 9.2 Throughout the year the Council was represented at all relevant Committees, as required within the Code of Practice for the Co-ordination of Works in Roads. These meetings are detailed below:
- The Roads and Utilities Committee Scotland (RAUCS)** where all Roads Authorities and PUs are represented together with representatives from Transport Scotland and the office of the Scottish Road Works Commissioner.
- The South East of Scotland Roads and Utilities Committee (SERAUC)** where representatives from the City of Edinburgh, Midlothian, East Lothian, West Lothian and Scottish Borders Councils attend, together with representatives from all PUs.
- The Local Roads and Utilities Committee (LRAUC)** is also known as the Local Co-ordination meeting. This includes representatives from every function and service within Services for Communities that have an involvement in roadworks or road occupation eg Lothian Buses, every Utility and the Tram Team.
- 9.3 At the LRAUC meeting on 6 May 2014, a request was made to all PUs, to place as much information regarding their potential works onto the Scottish Road Works Register, to allow for improved co-ordination of work to be carried out on the road network. At the same meeting it was confirmed that the 10 day allowance for the Council to make comment on proposed PU work, under Notices Awaiting Assessment, must be strictly adhered to.

Background reading/external references

Quality of Utility Company Reinstatements – Item 5.16, Transport and Environment Committee, 18 June 2012.

Code of Practice for Inspections”, 3rd edition, approved by the Roads Authority and Utility Committee Scotland, November 2012.

Code of Practice for the Co-ordination of Works in Roads, version 1.0, April 2013

John Bury

Acting Director of Services for Communities

Contact: Stuart Harding, Performance Manager

E-mail: stuart.harding@edinburgh.gov.uk | Tel: 0131 529 3704

Links

Coalition pledges	P28 - Further strengthen links with the business community by developing and implementing strategies to promote and protect the economic well being of the city. P33 Strengthen Neighbourhood Partnerships and further involve local people in decisions on how Council resources are used.
Council outcomes	CO19 - Attractive Places and Well Maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards and maintenance of infrastructure and public realm. CO26 - The Council engages with stakeholders and works in partnership to improve services and deliver on agreed objectives.
Single Outcome Agreement	SO4 - Edinburgh’s communities are safer and have improved physical and social fabric.
Appendices	Appendix A - Utility Company Performance Information 2013/14

Table 3.9A
Number of inspections for ALL PUs

TYPE	CATEGORY A	CATEGORY B	CATEGORY C	OTHER INSPECTIONS	TOTAL
	Inspections during the progress of the works.	Inspection within six months of the work being completed.	Inspection within three months of end of guarantee period.		
SAMPLE INSPECTION	518	669	690	-	1,877
TARGET INSPECTION	370	4,990	5,406	-	10,766
DEFECTIVE APPARATUS	-	-	-	5,834	5,834
DEFECTIVE REINSTATEMENT	-	-	-	7,457	7,457
INSPECTIONS RELATED TO CORING	-	-	-	501	501
OTHERS	-	-	-	528	528
TOTAL	888	5,659	6,096	14,320	26,963

Table 3.9B
Average fail rate for ALL PUs

	No of Failures	% Fail Rate
SAMPLE INSPECTIONS	269	15.3%
Category A	104	20.6%
Category B	92	14.1%
Category C	73	11.2%
TARGET INSPECTIONS	1327	16.5%
Category A	65	23.8%
Category B	706	14.7%
Category C	556	10.9%
DEFECTIVE REINSTATEMENTS	1427	12.8%

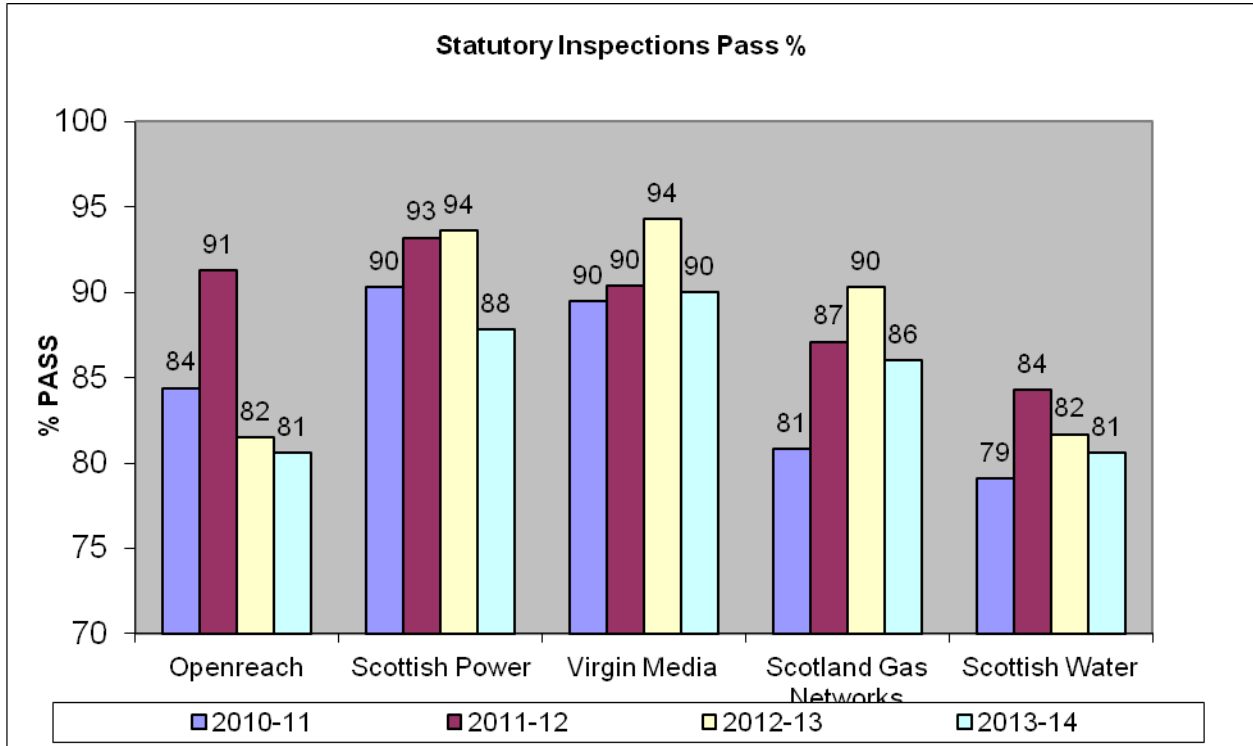
The target pass rate for all PUs is 90%.

Table 3.11

The table below shows the average percentage pass rate for defective apparatus for each PU over the past year. The target pass rate for all PUs is 90%.

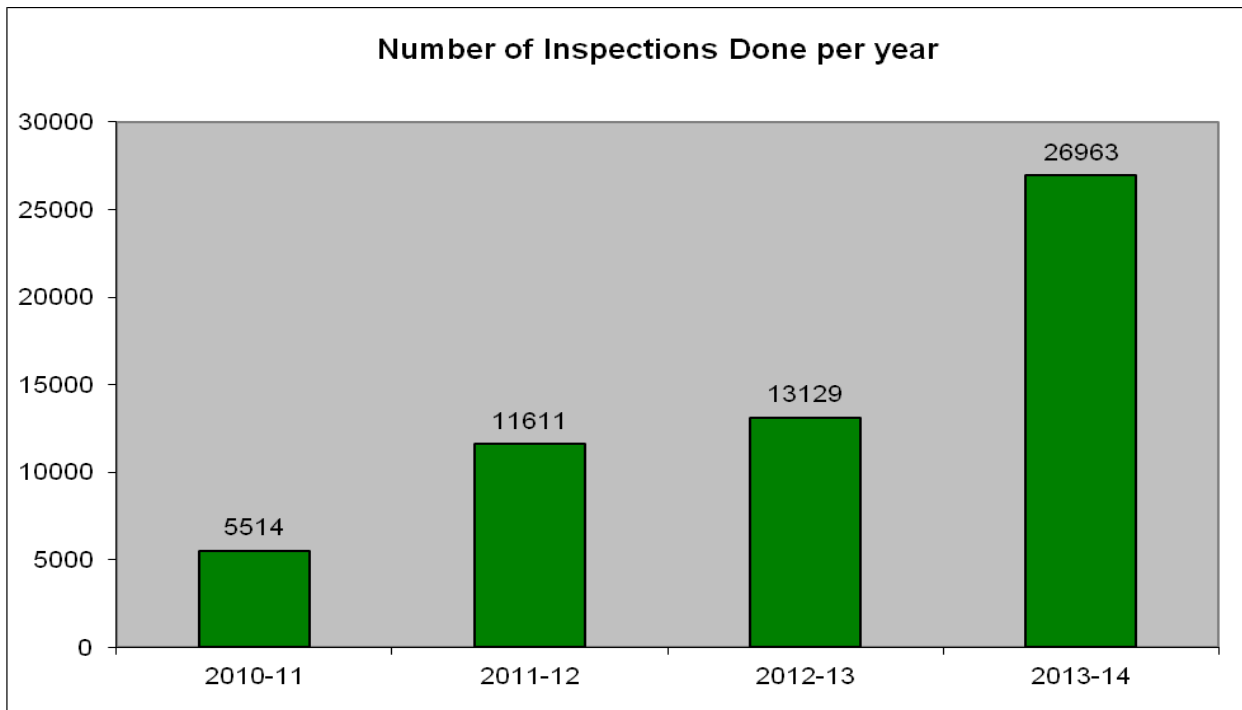
	Openreach	Scottish Power	Virgin Media	Scotland Gas Networks	Scottish Water
Pass Rate	81%	88%	90%	86%	81%

Graph 3.11

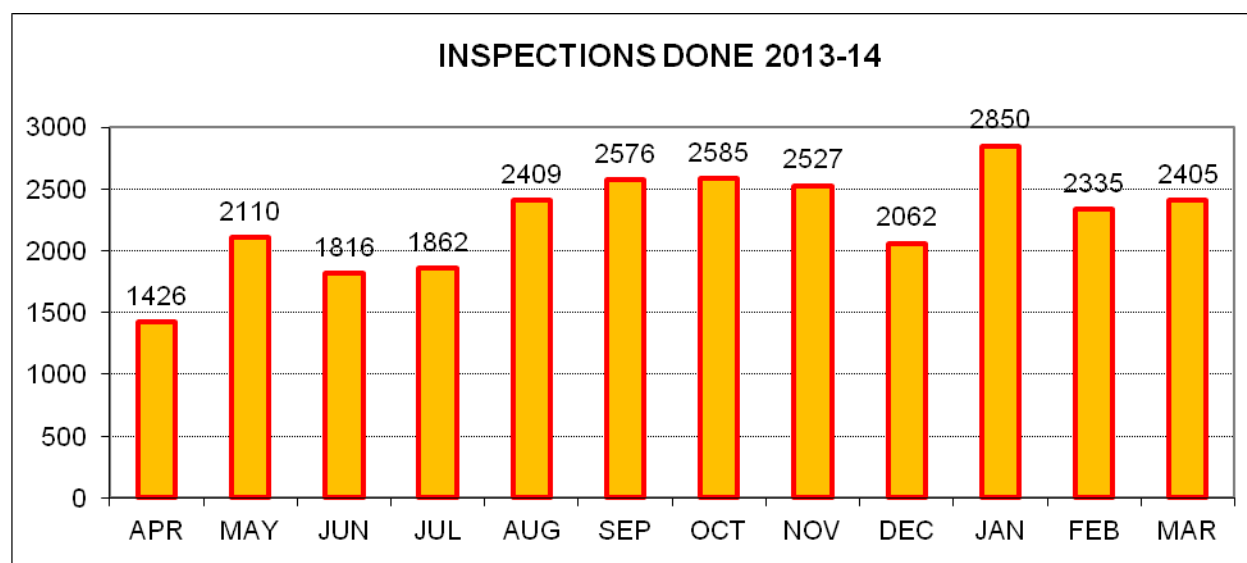


The target pass rate is 90%. All but one of the PUs did not achieve this target in 2013/14.

Graph 3.13



Graph 3.15



In 2013/14 there were 26,963 inspections carried out. The target of 20,000 inspections was met and exceeded. The reason for the marked increase in the number of inspections from July is due to the completion of training for the additional inspectors. The reason for the drop in February is due to one of the Inspectors resigning and the total number of Inspectors dropping to five.

Table 3.16

The total numbers of outstanding Defective Apparatus for each Quarter in 2013/14 are shown below.

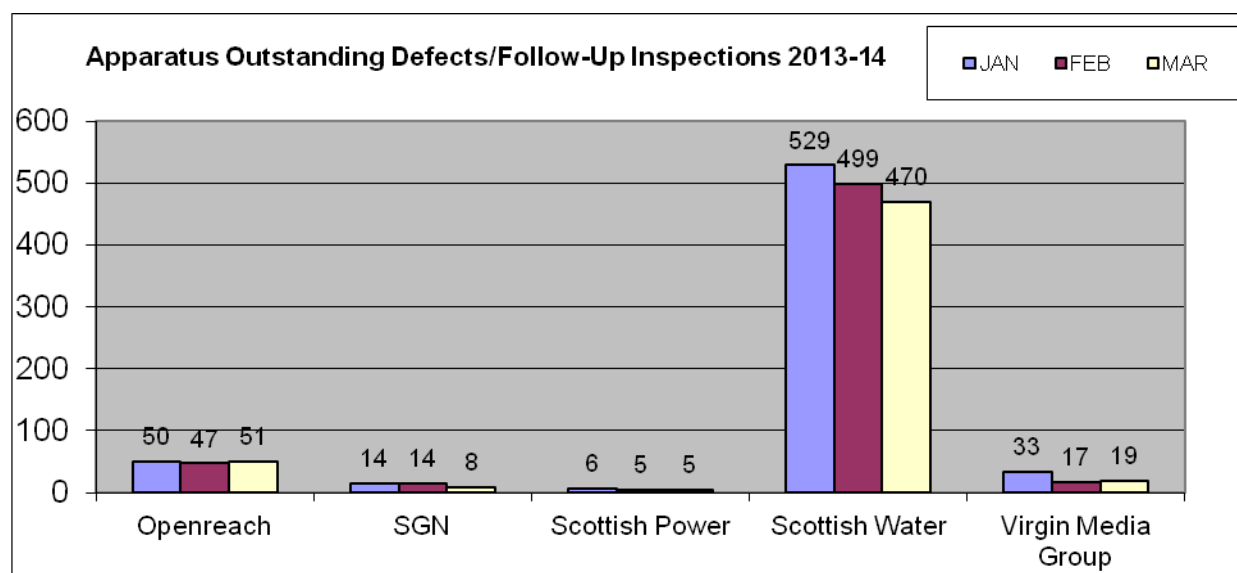
Utility	Q1	Q2	Q3	Q4
SGN	6	10	8	8
Scottish Water	534	548	477	470
BT Openreach	41	55	45	51
Scottish Power	8	9	3	5
Virgin Media	16	13	34	19
Totals	605	635	567	553

Total at end 2013/14	553	20.1% improvement
Total at end 2012/13	692	

Table 3.18

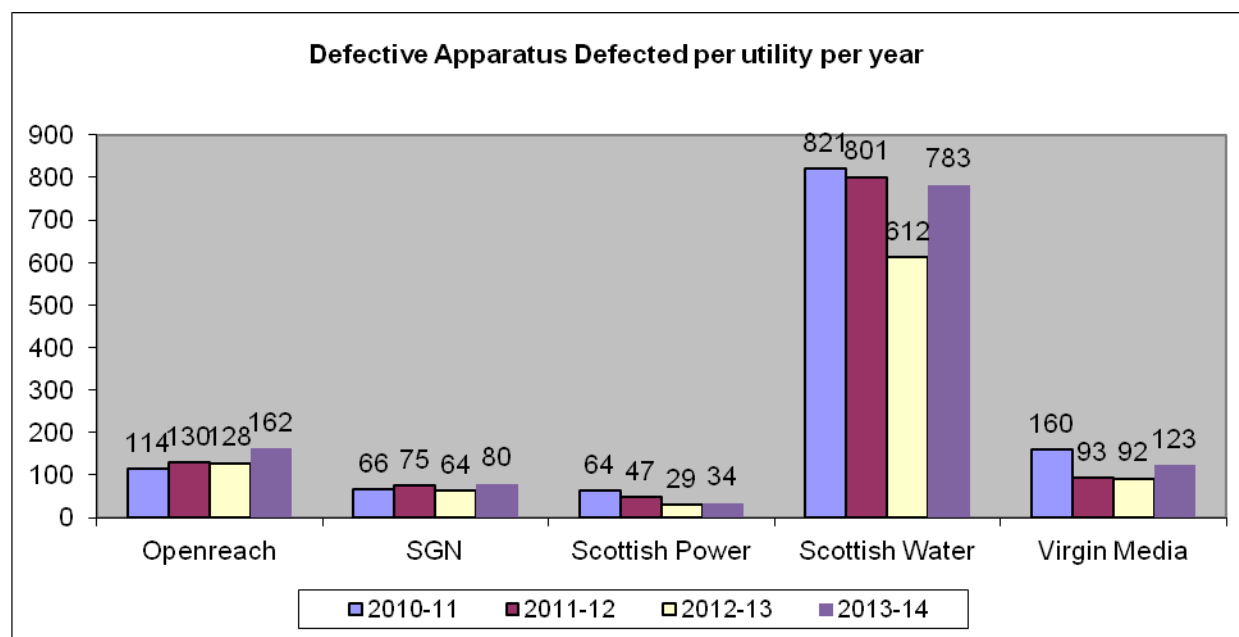
The comparison of the numbers of outstanding defective apparatus for each PU over the past four years, measured at the end of each year.

PU	2010-11	2011-12	2012-13	2013-14
Openreach	114	130	53	51
SGN	66	75	22	8
Scottish Power	64	47	8	5
Scottish Water	821	801	582	470
Virgin Media	160	93	27	19

Graph 3.18A

The number of outstanding defects for Scottish Water (470) is a long standing issue. This has been raised as a specific problem and an Improvement Plan has been requested to address this. All PUs, with the exception of Openreach and Virgin Media, showed a slight improvement in the last quarter of the year in the numbers of defective apparatus. Due to the increase in the number of inspections this, in turn, has resulted in there being little or no significant reduction in the overall numbers of defective apparatus.

Graph 3.18B



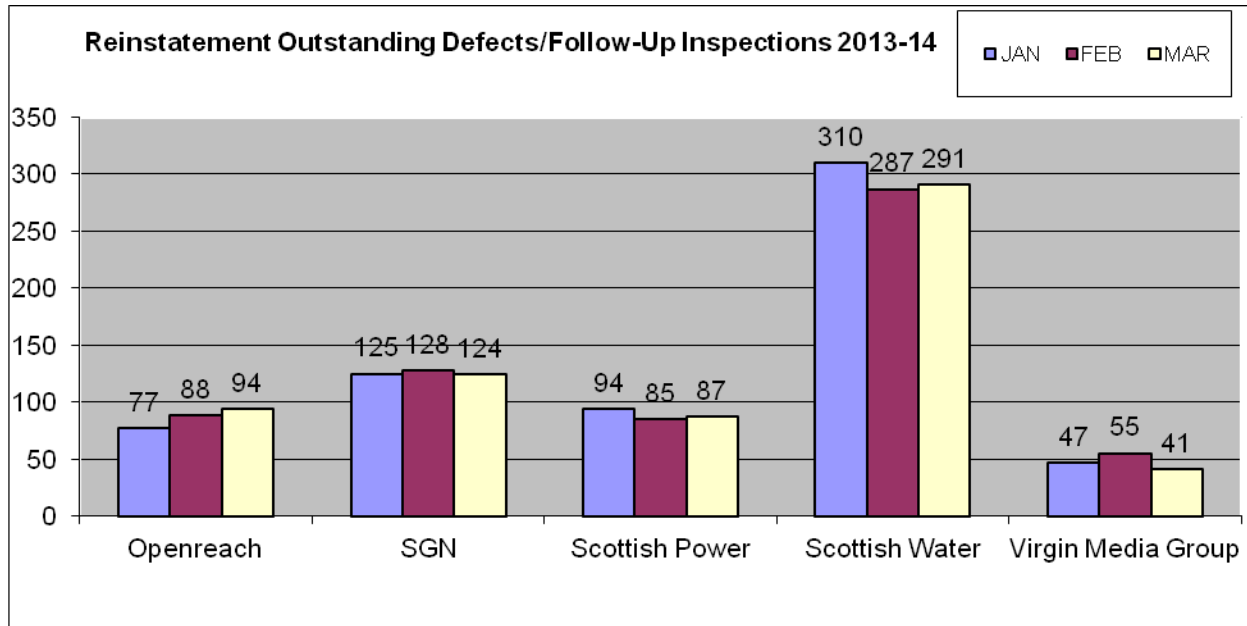
The numbers of outstanding defective apparatus had a positive trend and was improving until last year. This is due to regular and additional inspections being carried out. Every PU had more outstanding defects at the end of year.

Table 3.19

The total number of outstanding Defective Reinstatements for each quarter for each PU is shown below:

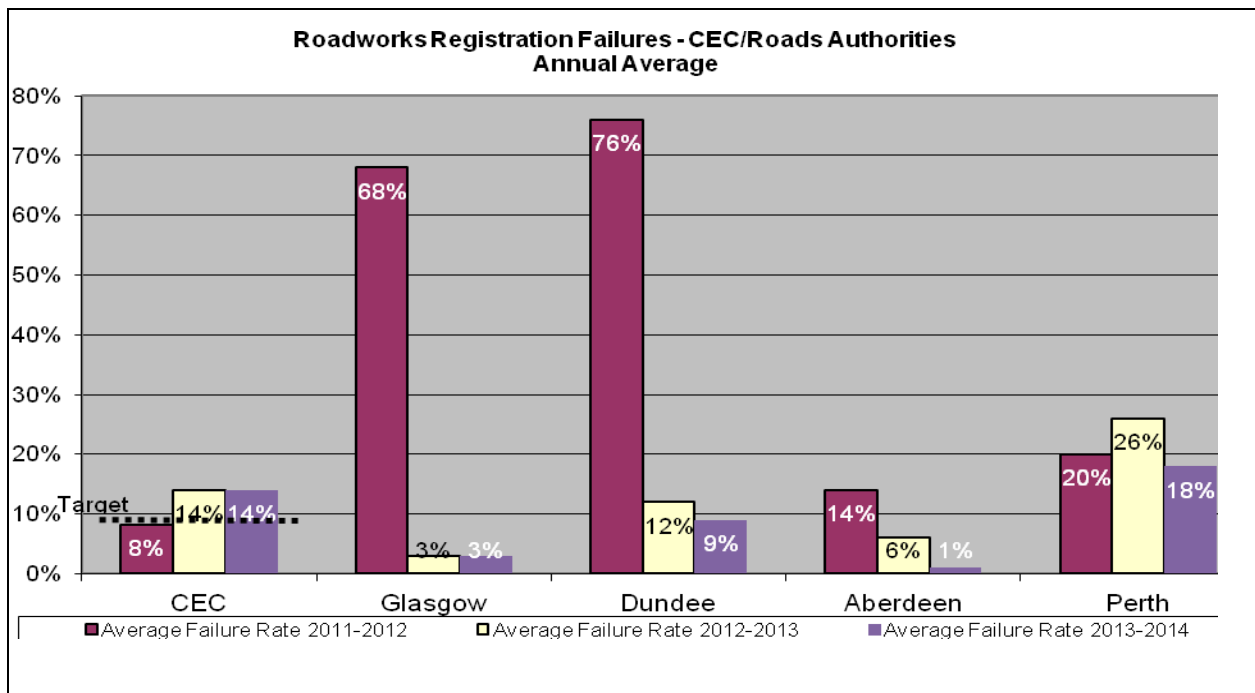
Utility	Q1	Q2	Q3	Q4
SGN	80	81	113	124
Scottish Water	202	277	286	291
BT Openreach	24	43	67	94
Scottish Power	29	45	81	87
Virgin Media	34	46	44	41
Totals	369	492	591	637

Graph 3.19



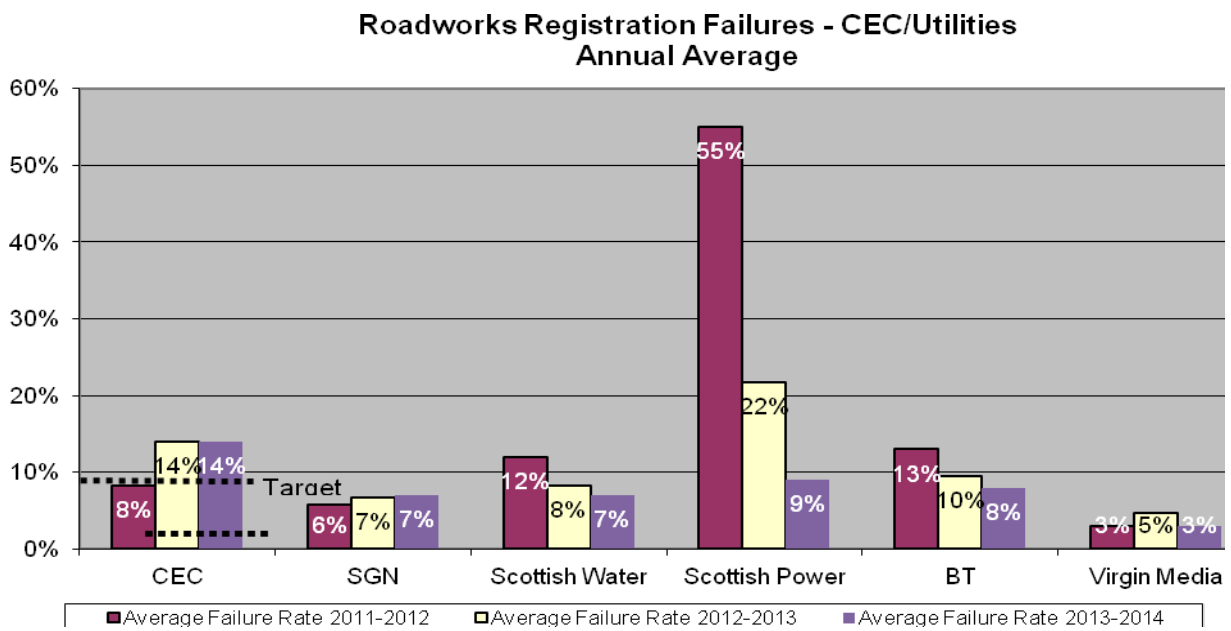
The number of outstanding or defective reinstatements has varied over Q4. Each PU has shown an increase in the number of failed reinstatements over the final three months of the year, with the exception of Virgin Media and SGN. The improvement however is small when compared to the totals outstanding.

Graph 3.23A



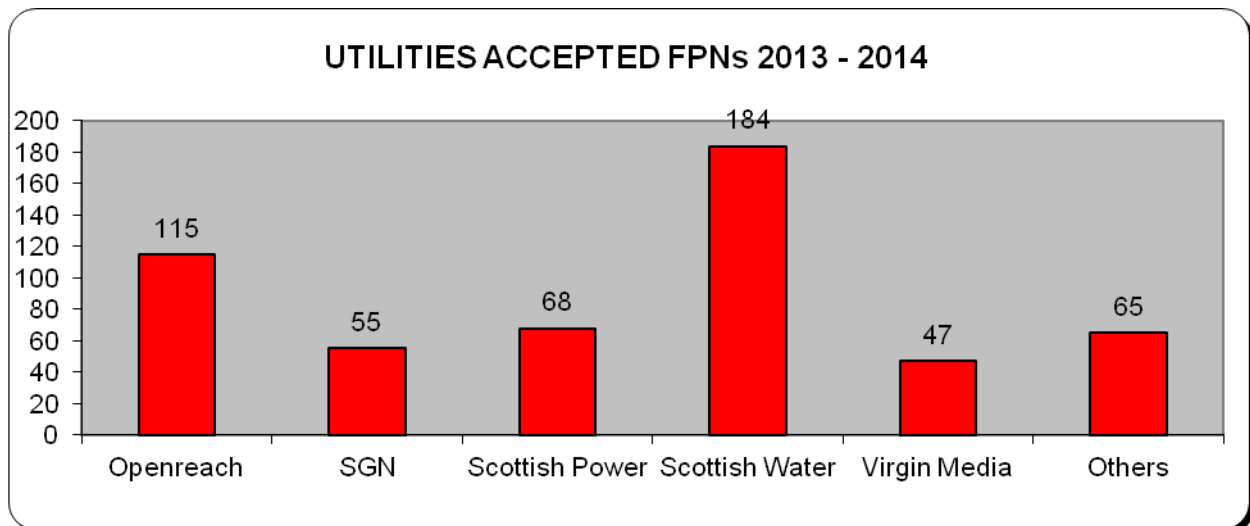
There is no target failure rate set for Roads Authorities. It is expected that their failure rate should be no worse than the average PU failure rate. CEC made the decision to set itself in internal target rate, for monitoring purposes. The target set is 9%. A failure rate of 14% was actually achieved at the end of the year. The failure rate for the two months prior to the end of year for CEC was 0.7% and 7.9%.

Graph 3.23B



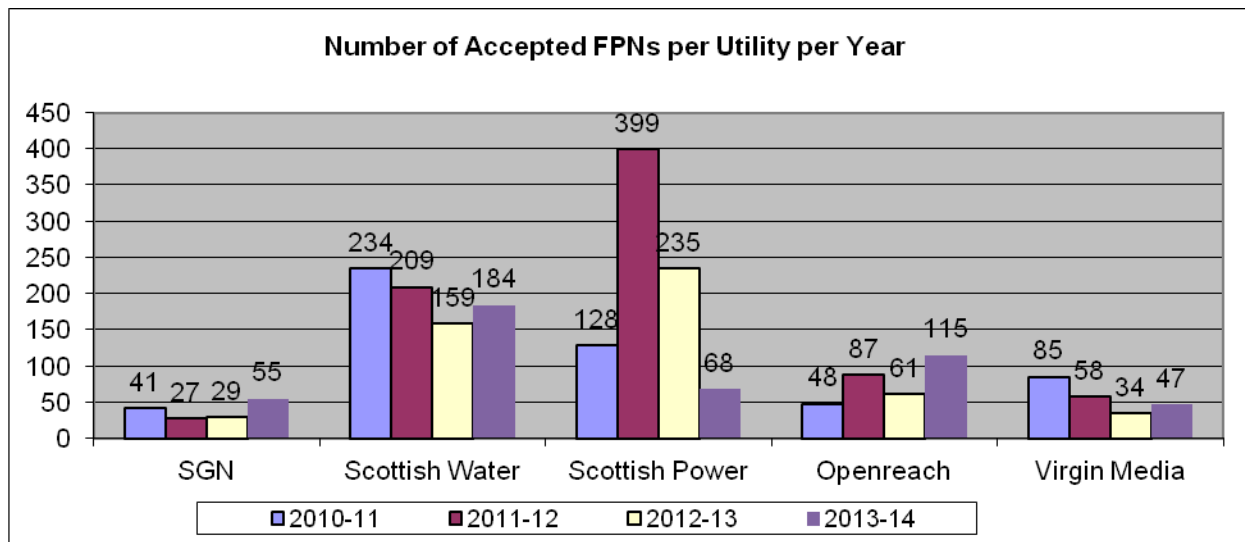
In 2012/13 over 13,000 inspections were carried out. It is estimated that in 2014/15 the target set for 2013/14 will be maintained.

Graph 3.24A



The failure rate by Scottish Water was the highest in Q1-Q4. This was due to their notices not being closed on time and/or no notice being received. These recurring issues will be raised at the next Liaison meeting. Improvement will be expected at the next quarterly monitoring.

Graph 3.24B



Scottish Power is the only PU that showed an improvement in the number of FPNs issued. This is due to their re-organisation of their notification team. All other PUs had more FPNs issued and these are for a variety of reasons, ranging from more work being carried out, re-organisations and staffing changes.

Transport and Environment Committee

10:00am, Tuesday, 26 August 2014

Seafield Waste Water Treatment Works – Monitoring of Scottish Water Odour Improvement Plan

Item number	7.15
Report number	
Executive	Executive
Wards	City wide

Executive summary

At a meeting on 23 November 2012, Committee agreed that representations should be made to Scottish Water to provide an independent emissions inventory at Seafield Waste Water Treatment Works to identify further possible odour reduction measures. Committee also requested that Scottish Water advise the Council of measures that will be taken to address operational management, risk planning and staff training inadequacies.

This report provides the key findings of the independent odour consultant and a summary by Scottish Water of the measures taken in response to the Committee's recommendations of 23 November 2012.

This report also provides a comparison of two complete periods of the Council's ongoing odour monitoring and assessment programme, 1 March 2012 to 31 October 2012 and 1 March 2013 to 31 October 2013 and information on the outcome of discussions with Scottish Water regarding the future use and provision of storm tanks in the Waste Water Treatment Works (WWTW). This report also provides a description of the key actions from two recent meetings in July and August 2014 attended by Council officials, elected members, Leith Links Residents Association (LLRA) and their representative, Professor Jackson.

Links

Coalition pledges	51
Council outcomes	Edinburgh's citizens experience improved health and wellbeing, with reduced inequalities in health.
Single Outcome Agreement	Edinburgh's communities are safer and have improved physical and social fabric.

Seafield Waste Water Treatment Works – Monitoring of Scottish Water Odour Improvement Plan

Recommendations

It is recommended that Committee:

- 1.1 notes that the Council's odour and monitoring programme indicates that sewerage nuisance and major odour incidents affecting local residents have reduced since 2012, although it is recognised that local residents continue to complain about odour nuisance;
- 1.2 notes the key findings of the Scottish Water independent Odour Emission Inventory, carried out between May and September 2013;
- 1.3 notes that the Seafield WWTW storm tanks continue to be identified as an odour source from the plant.
- 1.4 notes that LLRA are concerned that on several occasions the cleaning of the storm tanks has created odours within the community, and they are keen that prevention measures are put in place to prevent any future recurrence of these odours during this process. The Council therefore seeks reassurances from Scottish Water that all appropriate measures will be pursued to mitigate and minimise the impact of odour generated by storm tank cleaning in the local community.
- 1.5 notes the outcome of discussions with Scottish Water on current storm tank use and provision and instructs officers to engage in further dialogue with Scottish Water on their future plans for odour minimisation at the storm tanks at Seafield WWTW;
- 1.6 notes that the findings of the Council's odour monitoring and assessment programme indicate that Scottish Water and Veolia Water are currently compliant with the Sewerage Nuisance (Code of Practice) (Scotland) Order 2006 (CoP) and that the Odour Improvement Plan (OIP), allied to the improvements in operational management of the works, is currently minimising odour nuisance; and
- 1.7 notes that Abatement Measure A as defined in the Scottish Water and Stirling Water OIP is fully implemented, albeit recognising that the level of complaints regarding odour emanating from the plant which continue to be received from the local community is an ongoing cause for concern for all stakeholders;

- 1.8 notes that the current Council monitoring programme will continue to ensure that improvements in operational management and sewerage nuisance are sustained and will be reported on following the end of the monitoring period on October 2014;
- 1.9 instructs officers to formally advise Scottish Water that Abatement Measure A as set out in the Scottish Water and Stirling Water OIP has been fully implemented and to explore with Scottish Water which of the remaining potential odour improvement measures contained in the further options B to E outlined in the OIP continue to be relevant. To consider those which could still be employed to further reduce odour emissions from the WWTW, and to consider those measures which have already been implemented.
- 1.10 instructs officers to contact all other Scottish local authorities to request information on their experience of dealing with odour nuisance from WWTW within their area, with a particular focus on storm tank use and measures introduced to mitigate odour release during cleaning.
- 1.11 requests a future report on the outcome of ongoing and requested research from elected members and LLRA on the issues of:
- legal interpretation of a material breach of the CoP
 - information on planning conditions attached to relevant planning consents relating to boundary odour monitoring
 - along with data on any exceedences of a 10 parts per billion of hydrogen sulphide over the past 5 years.
- 1.12 The Committee notes that the Mott MacDonald Report concludes that the storm tanks are responsible for 53% of the odours coming from Seafield.
- 1.13 The Committee also notes that on several occasions the cleaning of the Storm Tanks has created odours within the community and that a future re-occurrence of these odours, during this process, may well require the serving of an Enforcement Notice.
- 1.13 The Council therefore urges Scottish Water to find an engineering solution to this process.

Background

- 2.1 The Sewerage Nuisance (Code of Practice) (Scotland) Order 2006 (CoP) placed a duty on Scottish Water to develop an Odour Improvement Plan (OIP) to minimise sewerage odour emissions detectable out with the boundary of Seafield Waste Water Treatment Works (WWTW). The CoP also places a duty on the Council to monitor and assess the effectiveness of Scottish Water's Seafield OIP.

- 2.2 The Water Services etc. (Scotland) Act 2006 places a duty on the Council to monitor compliance with the CoP and to investigate complaints of sewerage nuisance.
- 2.3 The Council's monitoring programme to assess the OIP commenced on 1 June 2011 following implementation of the OIP in May 2011. A report to Committee on 23 November 2012 provided the findings of the programme from 1 June 2011 to 31 August 2012.
- 2.4 The report of 23 November 2012 recommended that representations be made to Scottish Water to provide an independent emissions inventory to identify further possible odour reduction measures. It also requested that Scottish Water advise the Council of measures that will be taken to address operational management, risk planning and staff training inadequacies.
- 2.5 This report also provides a comparison of two complete periods of the Council's ongoing odour monitoring and assessment programme, 1 March 2012 to 31 October 2012 and 1 March 2013 to 31 October 2013 and information on the outcome of discussions with Scottish Water regarding the future use and provision of storm tanks in the Waste Water Treatment Works (WWTW).

Main report

- 3.1 The Council's Monitoring and Assessment Programme to assess Scottish Water's Seafield OIP commenced on 1 June 2011. Progress reports on the programme were made to Committee on 29 November 2011, 18 June 2012, 13 September 2012 and 23 November 2012. It is anticipated that a further report will be made to Committee following the completion of the current year's programme on 31 October 2014
- 3.2 As the programme has continued since 1 June 2011, it is possible to provide a comparison for two complete periods, 1 March 2012 to 31 October 2012 and 1 March 2013 to 31 October 2013 which can be used to assess the effectiveness of the OIP. These periods represent the warmer months when residents are most likely to experience odour release from the WWTW. Partial information for the current year is also supplied in Table 1. The results of staff monitoring during these comparison periods is also summarised in Table 1 below.

Table 1

Monitoring Period	1 March 2012 to 31 October 2012	1 March 2013 to 31 October 2013	1 March 2014 to 30 June 2014
Complaints received	182	82	59
No. of days where complaints were received	63	49	28

Complaint visits where staff detected odour	11	10	12
Days where 3+ complaints were received	16	6	6
Number of individual household complaining	60	33	27
Major Odour Incidents	4	0	1
Surveillance visits by staff to assess odours	452	124	54
Days when staff detected moderate or strong odour	14	4	4

- 3.3 It can be seen from the table that there has been a reduction in complaints received by the Council in 2013 compared with the same period in 2012. The number of individual households registering a complaint has similarly reduced from 60 to 33. It is believed that the measures taken by Scottish Water and Veolia, as requested by the Council to address operational management and risk planning inadequacies, have prevented any major odour release events in 2013. This compares with 2012, when four were recorded. Information recorded in the period 1 March 2014 to 30 June 2014 indicates a similar trend. A major odour release event is defined as the generation of a significant number of contemporaneous complaints which can be directly attributed to a source within the WWTW. It is however recognised that LLRA have expressed concerns that residents may no longer complain to the Council when odours are apparent.
- 3.4 During the period 1 March 2014 to 30 June 2014, the risk based monitoring programme has been maintained with a flexible response to the requirement for on site monitoring with 54 assessment visits carried out.
- 3.5 In recognition of the ongoing community concerns, and responding to the findings from the Scottish Water independently commissioned Mott MacDonald, specifically section 5.2.3 as noted in Appendix 2, the Council has indicated to Scottish Water, in writing, that it considers that the operation of the storm tanks at the WWTW is still potentially a significant source of odour release. Discussions around their operation have been held at regular liaison group meetings, attended by Scottish Water, Veolia Water, SEPA and officers from Services for Communities. Scottish Water has therefore assessed the Urban Waste Water Treatment (Scotland) Regulations 1994, which govern the

requirement for storm tank provision and determined that all four are still required.

- 3.6 On the morning of 15 April 2014, nine contemporaneous odour complaints were received from local residents and promptly investigated by Council staff. These investigations indicated that the odour release was due to a change in wind direction during planned storm tank cleaning operations. Veolia management took remedial action by covering the exposed material with fresh sewage to minimise further odour release and delaying cleaning operations until another suitable period where offshore winds would prevail. Following this event, a meeting was convened on 21 July 2014 between Council representatives, Leith Links Residents Association (LLRA) representatives and Professor Robert Jackson of Jackson Consulting, an independent Forensic Engineering Expert in Water, Construction and the Environment, to discuss a number of concerns raised by LLRA including:
- Storm Tank cleaning operations;
 - How a Local Authority determines the success or failure of the first phase of an Odour Improvement Plan submitted in accordance with Section 10 of the Sewerage Nuisance (Code of Practice) (Scotland) Order 2006 (CoP)
 - What constitutes a material failure to comply with the CoP;
 - Recent operational and management changes undertaken by Scottish Water and Veolia Water;
 - The Council's decision to serve an enforcement notice on Veolia Water in one instance where odour was witnessed in the local community but not serve notice on a subsequent occasion.
- 3.7 As the Council noted that a number of significant odour emissions in 2012 were due to foreseeable events and inadequate operational management controls, Scottish Water were requested to advise the Council on measures which would be taken to address those issues. A Seafield stakeholder meeting took place on 19 April 2013, Veolia Water presented an overview of those measures already implemented or due to be implemented and a summary is contained within Appendix 1.
- 3.8 It is noted that since the report to Committee in November 2012, Scottish Water in addition to undertaking the improvements set out in paragraphs 2.5 – 2.7 above, have also invested a further £1.16m in infrastructure improvements and £830K on additional operating costs associated with odour treatment. These works include:
- Improvements to storm tank control;
 - Routine replacement of plant components;
 - Modifications to the cake pad building;
 - Further odour control associated with the installation of the new thermal hydrolysis project; and
 - Operating costs related to power, chemicals and odour related staff training.

The Council acknowledges that Scottish Water have implemented Phase 1 of the OIP comprising Abatement Measure A which entails an agreed range of capital improvement measures including the provision of a new central odour control unit, the Preliminary Treatment Works Improvement Measures (as described in the OIP) and range of agreed operational improvements.

- 3.9 The report submitted to Committee on 23 November 2012 recommended that representations be made to Scottish Water to provide an independent emissions inventory to identify further possible odour reduction measures. Following discussions with Scottish Water, Mott MacDonald were appointed as independent odour consultants, undertaking studies and odour modelling during the period May to September 2013 with a final report being submitted to the Council in November 2013. The report does not identify any asset or operation currently responsible for odour release from Seafeld WWTW that had not been identified previously and addressed during the design and implementation of the OIP.
- 3.10 A “fit for purpose” audit of the WWTW, requested by the Council in 2007 was carried out by independent consultants on behalf of Scottish Water, giving a 25 year lifespan for the works at that time. Although the emissions inventory did not identify any recommendations for current odour abatement capital investment, it is considered that future investment and improvements will continue to be required to ensure that odour minimisation is achieved throughout the life of the WWTW. Scottish Water has given assurance that the plant will be maintained to ensure it is fit for purpose for the duration of its operation. Recent correspondence received from Scottish Water indicates that in the period to the end of the PFI contract asset plans will continue to focus on maintaining all existing levels of performance through the implementation of the Veolia’s ongoing asset refurbishment and replacement programme. Scottish Water has indicated that this will involve a significant level of investment in the Seafeld facility over the next 15 years focused on environmental and odour compliance.
- 3.11 A meeting took place, on 21 July 2014, between representatives of Leith Links Residents Association and Council officers, to discuss issues of odour nuisance and the officer’s interpretation of what constitutes a breach of the CoP which could result in enforcement action, along with a range of other matters. Officers are currently progressing 3 action points agreed at the meeting around the legal interpretation of a material breach of the CoP, information on planning conditions attached to relevant planning consents relating to boundary odour monitoring, along with data on any exceedences of a 10 parts per billion of hydrogen sulphide over the past 5 years.
- 3.12 A further meeting was held on 5 August 2014 chaired by Councillor Lesley Hinds and attended by local elected members, LLRA representatives, Professor Robert Jackson and Council Officials, where a series of further actions for the Council were agreed.
- To request clarification from Scottish Water as to the additional measures and investment which will be taken to mitigate the ongoing issue of

odours affecting the community during storm tank cleaning operations, such as that which occurred on the morning of 15 April 2014.

- To request from Scottish Water an analysis of the remaining potential odour improvement measures contained in the further options B to E outlined in the Scottish and Stirling Water OIP, see **Table 2** below which could still be employed to reduce further odour emissions from the WWTW. In addition to provide details of measures already taken or planned relating to Abatement Options B to E, or further mitigation measures implemented based on more current information, including improved working and management practices of the plant and up to date awareness of new and emerging technologies.

Table 2
Abatement Measures B to E

Abatement Measure	Description
B	As Abatement Measure A but also includes: The treatment of odours from the detritors, and The treatment of odour from the final effluent weirs.
C	As Abatement Measure B but also to include the provision of raised sludge cake storage silos to allow lorries to collect the sludge cake from within an enclosed area.
D	As Abatement Measure C but also to include the full enclosure of the Primary Settlement Tanks and the provision of odour treatment.
E	As Abatement Measure D but also to include the treatment of odours from the activated sludge plant.

- To contact all other Scottish local authorities to request information on their experience of dealing with odour nuisance from WWTW within their area with a particular focus on storm tank use, and measures introduced to mitigate odour release during cleaning.
- To make appropriate representations to the Scottish Government seeking a review of the CoP and the regulatory framework of the European Urban Waste Water Treatment Directive, which underpins the provision of storm tank provision at waste water treatment works.

Measures of success

- 4.1 A decrease in the number of major odour emission events from Seafield and a reduction in complaints from the local community.
- 4.2 That implementation of the Scottish Water Odour Improvement Plan, allied to improvements in operational management, results in minimisation of odour as required by the Sewerage Nuisance (Code of Practice) (Scotland) Order 2006.

Financial impact

- 5.1 The cost of continuing to operate the current odour assessment and monitoring programme can be met from existing budgets.

Risk, policy, compliance and governance impact

- 6.1 Compliance with the Water Services etc. (Scotland) Act 2006 and the associated Sewerage Nuisance (Code of Practice) (Scotland) Order 2006, and demonstration of compliance with the Odour Improvement Plan.

Equalities impact

- 7.1 This report proposes no changes to current policies or procedures and as such, a full impact assessment is not required. The contents have no relevance to the public sector Equality Duty of the Equality Act 2010.

Sustainability impact

- 8.1 Scottish Water's Odour Improvement Plan is intended to reduce odour output from Seafield WWTW to a level which will not constitute a sewerage nuisance, in accordance with the Sewerage Nuisance (Code of Practice) (Scotland) Order 2006.

Consultation and engagement

- 9.1 Community representatives, local MSP's and the Council are members of the Seafield Stakeholder Liaison Group which meets six monthly with Scottish Water and Veolia Water to discuss the Council's role as regulator, actions being taken by Scottish Water and Veolia Water to minimise odour emissions and any other issues relating to the impact of the works on the local community.
- 9.2 Mott McDonald, Scottish Water's independent odour consultants contracted to carry out the Odour Emission Inventory Report requested by the Council, carried out stakeholder interviews with a number of local residents to assist in the preparation of the report.
- 9.3 Meetings with elected members and LLRA representatives have taken place in July and August 2014, to agree a series of actions to progress the exploration of further potential mitigation measures.

Background reading/external references

[Seafield Waste Water Treatment Works - Monitoring of Scottish Water Odour Improvement Plan - November 2012](#)

[Seafield Waste Water Treatment Works - Monitoring of Scottish Water Odour Improvement Plan - September 2012](#)

[Seafield Waste Water Treatment Works - Odour Improvement Plan Update - June 2012](#)

[Seafield Waste Water Treatment Works - Odour Improvement Plan Update - November 2011](#)

[Seafield Waste Water Treatment Works - Odour Improvement Plan Update November 2010](#)

[Seafield Waste Water Treatment Works - Odour Improvement Plan Update - November 2009](#)

[Seafield Waste Water Treatment Works - Odour Improvement Plan Update May 2008](#)

Seafield STW Odour Emissions Inventory – Final Report – November 2013

John Bury

Acting Director of Services for Communities

Contact: Susan Mooney, Head of Service

E-mail: susan.mooney@edinburgh.gov.uk | Tel: 0131 529 7587

Contact: Natalie McKail, Environmental Health, Scientific Services, Bereavement, Registration and Local Community Planning Manager

E-mail: natalie.mckail@edinburgh.gov.uk | Tel: 0131 555 7980

Links

Coalition pledges	51
Council outcomes	Maintain and enhance the quality of life in Edinburgh
Single Outcome Agreement	Edinburgh's citizens experience improved health and wellbeing, with reduced inequalities in health. Edinburgh's communities are safer and have improved physical and social fabric
Appendix	Appendix 1 - Scottish Water Seafield Wastewater Treatment Works – Summary Paper Appendix 2 – Executive Summary - Section 5 Odour Emissions Inventory – Seafield STW Odour Emissions Inventory Final Report – Mott MacDonald

Scottish Water Seafield Wastewater Treatment Works
– Summary Paper

This paper summarises Scottish Water's actions taken in response to the recommendations contained in CEC's Transport & Environment Committee Report 7.11 of 23rd November 2012.

6.1 It is recommended that the Committee: b) makes representations to Scottish Water to undertake an independent emissions inventory of the Treatment Works to assist in identifying further odour reduction measures and to deal with foreseeable non-routine events; subsequently, to develop an incremental plan, in accordance with the Code of Practice, including appropriate investment requirements to address these measures;

In March 2013, Scottish Water invited tenders from 6 independent environmental consultancy firms to undertake an independent odour emissions inventory at Seafield Waste Water Treatment Works (WwTW). To maintain an independent approach, Scottish Water was not prescriptive in defining the exact detail of the inventory and it was left to the consultants to formulate a comprehensive and representative inventory of the Summer 2013 Seafield operations. The selection process was based on a matrix scoring system, taking account of the consultant's approach to the inventory project. Mott MacDonald was appointed and commenced site work at the end of May 2013. Mott Macdonald was given unfettered access to all parts of the site paperwork and was party to meetings, daily reports and operational notifications. The sampling programme was flexible enough to account for site conditions worthy of specific assessment (e.g. storm tank use). Through a series of process unit samples and weekly sniff tests, Mott Macdonald developed a baseline odour inventory, 'overlaid' four non-routine events and produced a comprehensive report detailing all findings. The Edinburgh summer of 2013 was both drier and warmer than the 1981-2010 long term average as measured by the Met Office. The summer was the driest since 2006 and conditions during July in particular attracted local and national media with heatwave conditions comparable to Barcelona. Whilst noting that the inventory project did not identify any source of 'unknown' odour, the inventory report outlined a number of recommendations which shall be taken forward:

- That the report be used to inform dialogue between SW and CEC.
- That the report be used to inform future revisions of the Odour Management Plan.
- That SW investigate the observed H₂S spikes within the Seafield siphon house (offsite from WwTW).
- Continued monitoring of OCU2 against design parameters.
- That the site staff (Veolia or Stirling Water) continue with sniff tests to supplement the work currently undertaken by Odour Technicians.
- Note that H₂S may be used as a surrogate to odour units, subject to further data collection and analysis.

6.1 It is recommended that the Committee: c) notes that a number of significant odour emissions were due to foreseeable events and demonstrated inadequate operational management controls; Scottish Water is requested to advise the Council of the measures which will be taken to address operational management, risk planning and staff training relating to the future operation of the Treatment Works;

A wide range of operational management controls have been implemented since November 2012. These have been highlighted at Stakeholder meetings and via the regular Odour Liaison Meetings. As well as specific odour management and treatment related changes, other asset and contingency changes have been implemented which have consequential benefits, consisting of:

- Sludge management changes including the commissioning of a sludge dewaterer and the procurement of a mobile sludge centrifuge (both as learning actions following the Cake Pad issues of March 2012).
- Development of the Sludge Thermal Hydrolysis Plant which will deliver a fully pasteurised and inert sludge cake together with new odour containment and treatment.

Key changes with a focus on odour management are:

- Covering of the inlet screening skips.
- Introduction of a competency based framework for all employees with inclusion of odour management.
- A focus on operation and maintenance strategies so as to reduce reactive work and have a more planned operational environment across the site.
- Greater monitoring and awareness of key process indicators such as inlet solids loading, sludge cake quality and chemical usage.
- The design and implementation of a new control system for the storm tanks so that the four units can be filled in series rather than in parallel. This will allow containment of smaller storm events in a controlled fashion thereby allowing quicker cleaning of a smaller surface area.
- A change to the staffing structure of Seafield WwTW to provide greater emphasis on planned maintenance work and greater odour management support to the 24hr Unit Controllers.
- Closer linkage between operational and communications teams to ensure co-ordination of key messages and to inform the odour risk assessment process.

6.1 It is recommended that the Committee: d) indicates to Scottish Water that operation of the storm tanks is a significant source of odour release that requires further action to address the problem

Scottish Water noted the report recommendation and formed a working group to consider and review the sewerage system and treatment plant as a “system”. The Urban Waste Water Treat (Scotland) Regulations 1994 set out the minimum requirements for treatment and containment of stormwater discharges. The catchment flow characteristics were considered as if Seafield was a greenfield site in order to determine if the storm tanks as built in the 1970s exceeded current regulations. With input from Scottish Water’s Regulation team, it was calculated that all four storm tanks are required in order to meet the storage volume as required by the Regulations. This was advised to the full Stakeholder group in April 2013. However, in recognition of the odour risk the focus returned to the management of the storm tanks and the understanding of upstream flows and catchment characteristics. As outlined above, work has progressed in order to allow the tanks to fill in series rather than in parallel. This will translate across into the Odour Management Plan and supplement the good work that has been achieved in this area of the plant. Running in parallel to the Seafield activities, Scottish Water are working with City of Edinburgh Council to understand the interaction between the sewerage system, watercourses and flood areas. This may inform options for further stormwater management in the catchment or at Seafield. This £1.5m modelling project (i.e. building the model) is due for completion by 7th January 2015, thereafter the Needs and Options will be assessed in conjunction with the Council as a key stakeholder.

6.1 It is recommended that the Committee: e) requests Scottish Water to provide a timescale for completion of the emissions inventory and the programme of operational management developments;

As advised at Stakeholder and Odour Liaison Group level, timescales and updates have been provided to Council officers.

th
6 February 2014

Craig Carr | PFI Project Coordinator

Scottish Water | Bullion House | Invergowrie | Dundee | DD2 5BB

T: 01382 563342 | M: 07875 873878

5 Odour Emissions Inventory

5.1 Baseline inventory

The baseline scenario takes into account odour emissions generated from the current operations and existing equipment at the site and provides a benchmark for comparison with the odour impacts for other scenarios.

Baseline odour emission rates were generally derived from average odour emission rates measured in the survey. Where data were not available these have been estimated based on Mott MacDonald's experience elsewhere.

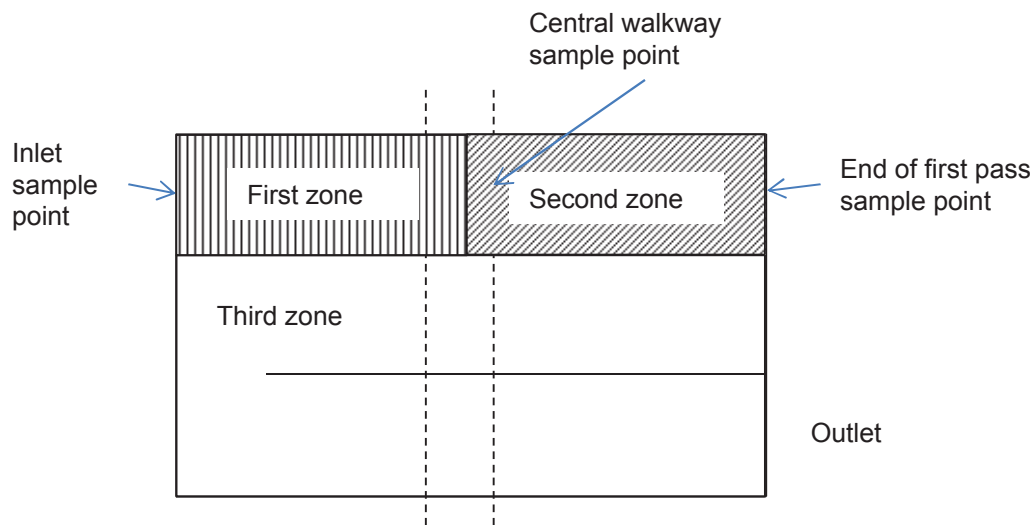
In the baseline case, the following has been assumed:

- All process units normally in operation are in service and operating normally
- All odour control systems extracting and treating extracted air to remove a minimum of 95% of incoming odour.
- All storm tanks clean and empty.
- All covers are in place
- Doors on sludge treatment buildings are closed
- Complete biogas combustion – hence not odorous
- Pressure relief valves on sludge digesters not activated

For the purpose of calculating the aeration tank emission rates the tanks were assumed to be split into three zones. The first zone was from the inlet to the central walkway in the first pass. The second zone was from the central walkway to the end of the first pass. The third zone was deemed to be the final two passes. The emission rates for the first and second zones were calculated from the mean of the inlet and outlet samples from each zone ie for the first zone the emission rate was calculated from the mean of the "Inlet" and "Central walkway" samples and for the second zone the emission rate was calculated from the mean of the "Central walkway" and "End of first pass" samples.

The sampling locations and how these relate to the aeration tank zones for calculating emission rates is shown in Figure 5.1.

Figure 5.1: Aeration lane sampling locations and zones



The mass balance from which the odour emissions inventory has been derived is detailed in Appendix D. The baseline odour emissions inventory is shown in Table 5.1.

Of the total odour emissions from the site, 39% (59,598 OU_E/s) are from the aeration lanes 35% (53,997 OU_E/s) are from the primary sedimentation tanks and 9% (13,403 OU_E/s) are from the detritors. These values show that during baseline conditions 83% of the odour load originates from three odour sources.

Table 5.1: Seafield STW baseline odour inventory

Odour source	No of units	Total emission area m ²	Emission rate OU _E /m ² .s	Odour load OU _E /s	Emissions measured/assumed	Comments
Coarse screen skips (screenhouse)	2	12	1	12	Assumed	Washed screenings
Fine screen skips (screenhouse)	4	24	64	1,539	Assumed	Emission rate includes for 40% reduction due to covers
Fine screen skips (outside screens)	3	18	64	1,154	Assumed	Emission rate includes for 40% reduction due to covers
Coarse screen skips (outside screens)	3	18	1	18	Assumed	Washed screenings
Detritors	4	1,003	13.4	13,403	Measured	Based on first two surveys since some units out of operation in subsequent survey
Grit skips	4	24	1	24	Assumed	Equal to coarse screenings emission rate
Storm tanks	4	12,000	0.44	5,280	Assumed	Empty with background emission rate assumed equal to final settlement tanks emission rate
Storm tanks distribution channel	1	454	0.44	200	Assumed	Emission rate equal to storm tanks
Storm overflow channel	1	451	0.44	199	Assumed	Emission rate equal to storm tanks
Primary sedimentation tanks	4	9,677	5.6	53,997	Measured	
Aeration lane – First zone	4	1,006	30.3	30,521	Measured	
Aeration lane – Second zone	4	1,006	14.9	14,995	Measured	
Aeration lane – Third zone	4	4,023	3.5	14,082	Measured	
Final effluent channel	1	782	0.44	344	Assumed	Emission rate equal to final settlement tanks emission rate
Final effluent UV channel	1	322	0.44	142	Assumed	Emission rate equal to final settlement tanks emission rate
Final sedimentation tank distribution chamber	2	37	12.4	458	Measured	

Table 5.1 continued overleaf.

Table 5.1: Seafield STW baseline odour inventory (continued)

Odour source	No of units	Total emission area m ²	Emission rate OU _E /m ² .s	Odour load OU _E /s	Emissions measured/assumed	Comments
Final sedimentation tanks	8	11,376	0.44	5,005	Measured	
Final sedimentation tank (converted PST)	1	2,419	0.44	1,064	Measured	
SAS balancing tank	1	98	2.5	248	Measured	
Digested sludge holding tank	1	380	5.7	2,176	Measured	
Primary sludge screenings skip	1	6	106.9	641	Assumed	From previous surveys on other sites
Imported sludge screenings skips	2	12	106.9	1,283	Assumed	From previous surveys on other sites
OCU 1	1	-	-	3,095	Measured	
OCU 2	1	-	-	1,428	Measured	
Main OCU	1	-	-	919	Measured	
Digester OCU	1	-	-	6	Measured	
Total				152,234		

5.2 Impact of non-routine events on inventory

The impact on odour emissions on a number of non-routine events has been assessed. The events identified, which the survey results could be used to assess, were:

- A reduction in the performance of OCU1
- A reduction in the performance of OCU2
- Storm water contained within the storm tanks
- Sludge cake storage building door left open²

A period of reduced removal efficiency by OCU2 occurred during the survey period and there were also periods where the storm tanks were in operation. During the survey period there were no periods of reduced removal efficiency by OCU1 and, apart from routine usage, there was no occasion during the survey period where the sludge cake storage building was left open for extended periods of time.

² The sludge treatment at Seafield is being modified in 2013 and 2014 to provide enhanced anaerobic digestion in the form of thermal hydrolysis. As part of this project the existing sludge cake storage building will be disconnected from OCU2 and the air from the cake pad building will be extracted to a new odour control unit. No allowance has been made for this as part of the development of this inventory. Once connected to the new odour control unit it is understood that the ventilation rate will increase and reduce the likelihood of fugitive emissions from the cake pad building, even with the door open. Again no allowance has been made for this.

5.2.1 Reduced performance of OCU1

In this scenario it is assumed that the performance of the biological treatment in OCU1 has reduced for some reason such as loss of the wetting system. It is assumed that the associated fans are still extracting air from the picket fence thickeners and the imported sludge storage tanks and therefore the odour would be dispersed into the atmosphere from the stack.

OCU1 has a measured average inlet concentration of 91,965 OU_E/m^3 along with an air flow of 2,491 m^3/h . If treatment within the odour control unit were to fail completely, an odour load of 63,640 OU_E/s is estimated to be released from the stack.

Total failure of treatment is unlikely hence a partial reduction in treatment performance and the worst case emissions measured during the survey have also been considered. The impact of the various scenarios is presented in Table 5.2.

Table 5.2: Impact of reduced performance of OCU1 on baseline emissions

Scenario	Odour removal	Odour load from OCU1 (OU_E/s)	Total odour load from site (OU_E/s)	Odour increase above baseline
Baseline from OCU1	>95%	3,095	152,234	0%
Partial reduction in treatment performance	50%	31,817	180,956	19%
Total treatment failure	0%	63,640	212,779	40%
Worst case during survey	92%	4,964	154,103	1%

5.2.2 Reduced performance of OCU2

In this scenario it is assumed that the performance of the biological treatment in OCU1 has reduced for some reason such as loss of the wetting system. This actually occurred during the sampling period. It is assumed that the associated fans are still extracting air from the all the various sludge treatment locations from which they currently extracts² and therefore the odour would be dispersed into the atmosphere from the stack.

OCU2 has a measured average inlet concentration of 25,842 OU_E/m^3 along with an air flow of 4,792 m^3/h . If treatment within the odour control unit were to fail completely, an odour load of 34,399 OU_E/s is estimated to be released from the stack.

Total failure of treatment is unlikely hence a partial reduction in treatment performance and the worst case emissions measured during the survey have also been considered. The impact of the various scenarios is presented in Table 5.3.

Table 5.3: Impact of reduced performance of OCU2 on baseline emissions

Scenario	Odour removal	Odour load from OCU2 (OU _E /s)	Total odour load from site (OU _E /s)	Odour increase above baseline
Baseline from OCU2	>95%	1,428	152,234	0%
Partial reduction in treatment performance	50%	17,200	168,006	10%
Total treatment failure	0%	34,399	185,205	22%
Worst case during survey	40%	20,700	171,506	13%

5.2.3 Storm tank usage

In the base scenario (storm tanks empty), all horizontal surfaces in contact with the storm water are estimated to emit a background odour of 0.44 OU_E/m².s (equal to the final effluent emission rate). Survey results for storm water give an average surface emission rate of 2.66 OU_E/m².s, which increases the average odour load from the storm tanks to 34,328 OU_E/s during storm conditions.

The highest surface emission rate measured during the survey was obtained while the storm tanks had been drained and were awaiting cleaning. This scenario has also been considered. The impact of the various scenarios is presented in Table 5.4.

Table 5.4: Impact of storm tanks on baseline emissions

Scenario	Odour emission rate from storm tanks (OU _E /m ² .s)	Odour emission rate from storm tanks (OU _E /s)	Total odour emissions from site (OU _E /s)	Odour increase above baseline
Baseline from storm tanks	0.44	5,280	152,234	0%
Average from storm tanks	2.66	34,328	181,282	19%
Worst case during survey	6.9	89,046	236,000	55%

It was noted that there is a procedure within the site Odour Management Plan for emptying storm tanks that requires that the storm tanks contents be returned as soon as possible to prevent the contents becoming odorous. There is also a requirement to clean the storm tanks when the wind is blowing offshore. The significant increase in the overall odour produced by the site indicates the validity of the approach detailed within the Odour Management Plan.

5.2.4 Cake pad open door

The cake storage building is a potential odour source with high odour concentrations inside the building. Due to frequent truck movement the vehicle access door to the building is opened frequently. There is no air lock to prevent odours escaping from the building. The site Odour Management Plan requires that the cake pad door only be open during entry and exit of vehicles from the cake pad building but as this is an automatic operation on entry and a manual operation on exit the door could conceivably be left open for extended periods.

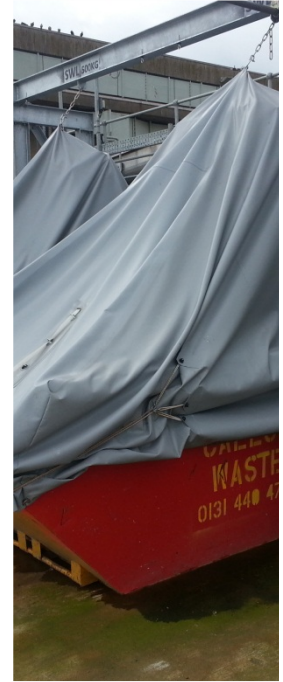
The average cake pad odour concentration measured during the survey was 10,837 OU_E/m^3 .

The key assumption for assessment of the impact of the door being open is the air exit velocity. This will be dependent on a number of different factors including wind direction, the temperatures inside and outside the building and the pressure difference between the inside and outside of the building. The impact of a range of exit velocities is presented in Table 5.5. The mass balance within Appendix D assumes an exit velocity of 0.5m/s.

Table 5.5: Impact of cake pad door opening on baseline emissions

Exit velocity (m/s)	Odour emission rate from cake pad (OU_E/s)	Total odour emissions from site (OU_E/s)	Odour increase above baseline
0 (Baseline – door closed)	0	152,234	0%
0.1	27,093	179,327	18%
0.25	67,731	219,965	44%
0.5	135,463	287,697	89%

The results above validate the approach set out in the Odour Management Plan since there could be a substantial release of odour from the sludge cake building if the door is left open for an extended period of time



Seafield STW Odour Emissions Inventory

Final Report

November 2013

Scottish Water



**Scottish
Water**
Always serving Scotland

Mott MacDonald

Seafield STW Odour Emissions Inventory

Final Report

November 2013

Scottish Water

Castle House, Carnegie Campus, Castle Drive, Dunfermline, KY1 8GG

Issue and revision record

Revision	Date	Originator	Checker	Approver	Description	Standard
0A	01 November 2013	M Smith J Van de Moortel	A Paskins	G Helders	Initial issue	
0B	11 November 2013	M Smith	A Paskins	G Helders	Final report	

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it..

Contents

Chapter	Title	Page
	Executive Summary	i
1	Introduction	1
1.1	Project Background _____	1
1.2	Site Description _____	1
2	Methodology	4
2.1	General _____	4
2.2	Sampling and analysis _____	4
2.3	Sniff tests _____	4
3	Sampling Programme	6
3.1	Proposed programme _____	6
3.2	Actual programme _____	6
4	Review of data collected	8
4.1	Bag sampling _____	8
4.2	Inlet hydrogen sulphide monitoring _____	10
4.3	Sniff tests _____	13
5	Odour Emissions Inventory	14
5.1	Baseline inventory _____	14
5.2	Impact of non-routine events on inventory _____	17
6	Conclusions	21
7	Recommendations	22
	Appendices	23
	Appendix A. Site Layout _____	24
	Appendix B. Silsoe Odours Ltd Report _____	25
	Appendix C. H ₂ S and Odour Correlation _____	86
	Appendix D. Mass Balance _____	89
D.1	Mass balance and assumptions _____	89
D.2	Derivation of emission rates _____	91

Executive Summary

Seafield STW treats the wastewater from Edinburgh, much of Midlothian and coastal East Lothian. It is also a sludge treatment centre treating sludge from various water and wastewater treatment works in the surrounding area. The works is operated on behalf of Scottish Water by Stirling Water (the Concessionaire) and Veolia Water Outsourcing Ltd (VWOL) (the Operator). City of Edinburgh Council has requested that Scottish Water prepare an odour emissions inventory in order to better understand the range of emissions from the site. In response to this request, Mott MacDonald has been appointed to undertake a survey of the works and to prepare an inventory for the odour emissions within the site boundary.

In order to develop the odour inventory data was gathered through a combination of sampling from process units, and through conducting weekly sniff tests on site. Mott MacDonald subcontracted the sampling and analysis to Silsoe Odours Ltd. Silsoe Odours' laboratory is accredited by UKAS to undertake the determination of odour concentration measurement by dynamic dilution olfactometry required by BS EN 13725.

Summer 2013 was predominantly warmer and drier than those preceding it. Consequently the incoming wastewater was of generally of higher concentration and lower volume than during a typical summer. It is likely that this has caused higher odour emissions from the treatment works; however there is no sample data from previous available for comparison.

From the results, a baseline odour inventory was developed with the following being assumed:

- All process units normally in operation are in service and operating normally
- All odour control systems extracting and treating extracted air to remove a minimum of 95% of incoming odour.
- All storm tanks clean and empty.
- All covers are in place
- Doors on sludge treatment buildings are closed
- Complete biogas combustion
- Pressure relief on the sludge digesters not activated

The baseline inventory identifies a range of emissions from Seafield STW. The detailed inventory is presented in Section 5. The largest sources of emissions are:

- Detritors (9% of total baseline emissions)
- Primary settlement tanks (35% of total baseline emissions)
- Aeration tanks (39% of total baseline emissions)

The final settlement tanks (4%) and OCU1 (2%) also contribute a significant proportion of the total baseline emissions from the site. The remainder of the emissions comes from minor sources around the site.

The impacts of four non-routine events on the baseline were assessed, namely:

- A reduction in the performance of OCU1
- A reduction in the performance of OCU2
- Storm water contained within the storm tanks
- Sludge cake storage building door left open

A period of reduced removal efficiency by OCU2 occurred during the survey period and there were also periods where the storm tanks were in operation. During the survey period there were no periods of reduced removal efficiency by OCU1 and, apart from routine usage, there was no occasion during the survey period where the sludge cake storage building was left open for extended periods of time.

Each of these non-routine events as assessed leads to an increase in the average odour load from the site.

The impact from the storm tanks appears to be related to the point in the storm tank operational cycle with the highest emissions being recorded during storm tank cleaning.

The performance of OCU2 during the final two surveys indicated that the unit was not able to meet the 95% odour removal required by The Sewerage Nuisance (Code of Practice) (Scotland) Order 2006" (CoP); however because the unit was installed prior to 22 April 2006 the CoP only requires an equipment upgrade if the unit is causing an odour nuisance. There is no evidence to indicate that the reduced performance of the unit caused an odour nuisance. The reduced performance appears to have been at least partially as a result of temporary mechanical failure and may not be representative of normal performance. VWOL has subsequently addressed the mechanical failure.

The findings of this study should be used to inform future discussions between Scottish Water and CEC. The findings should also be used to inform future revisions of the Odour Management Plan for Seafield.

The reason for the H₂S spikes observed at the siphon inlet should be investigated further by Scottish Water with a view to preventing these recurring.

The on-going performance of OCU2 should be monitored to determine the range of inlet odour concentrations and whether they fall within the design capacity of the OCU. Cognisance should also be taken of the fact that the cake pad building, which is a major contributor to the odour load to OCU2, is to be connected to a new odour control unit as part of the thermal hydrolysis project and thus the load to OCU2 will reduce.

Consideration should be given to the Operator or the Concessionaire continuing the sniff tests, perhaps including visiting locations beyond the site boundary, so that Veolia and Stirling Water get an ongoing appreciation of the changes in odour arising from the various process units to supplement the walks round site currently undertaken by the Odour Technicians.

An initial review suggests that there is a reasonably good correlation between H₂S concentration and odour concentration from the various process units. There may be an opportunity to use H₂S monitoring as a surrogate for odour; however a greater level of understanding of the relationships for individual process units, is required including the identification of threshold levels to indicate when operator intervention might be required.

1 Introduction

This report details investigations into odour emissions from the Seafield Sewage Treatment Works (STW) in Edinburgh and develops these into an inventory of odour emissions from the site. The report also considers the impact of a range of foreseeable non-routine events on the emissions inventory.

The methodology for collecting the data and the results are presented within the report.

1.1 Project Background

Seafield STW, Edinburgh is operated on behalf of Scottish Water by Stirling Water (the Concessionaire) and Veolia Water Outsourcing Ltd (VWOL) (the Operator).

Between 2008 and 2011, Scottish Water and Stirling Water implemented the Seafield Odour Improvement Project (SOIP). This comprised:

- Covering the inlet works channels (apart from the quiescent areas of the detritors)
- Covering the channels transferring screened and degrittied sewage to the primary settlement tanks and storm tanks
- Covering the primary settlement tank weirs and launders
- Covering the channels collecting primary settled sewage and conveying it to the activated sludge plant feed pumping station.
- Covering the distribution chambers to the activated sludge plant
- Extracting odorous air from the underneath these covers and conveying it to a new odour control unit

City of Edinburgh Council (CEC) is the authority responsible for monitoring and enforcing performance regarding odour. It also conducts periodic surveys within the community both randomly and in response to specific complaints. CEC representatives also visit Seafield, usually in response to multiple complaints, but are also frequently unable to identify what has caused the complaints to be made.

CEC has requested that Scottish Water prepare an odour emissions inventory to better understand the range of emissions from the site. In response to this request Mott MacDonald has been appointed by SW to undertake an odour survey and to prepare an odour inventory for emissions from within the site boundary.

1.2 Site Description

Seafield STW treats the wastewater from Edinburgh, much of Midlothian and coastal East Lothian. As well as treating wastewater it is also a sludge treatment centre treating sludge from various water and wastewater treatment works in the surrounding area. The treatment works is located in the north east of Edinburgh beside the Firth of Forth. An annotated site layout is shown in Appendix A.

1.2.1 Wastewater treatment

The wastewater treatment works comprises

- Inlet works & preliminary treatment

- Sewage screw lift pumping station (Marine Esplanade Pumping Station (MEPS))
- Inlet from Siphon House
- Five coarse screens
- Five fine screens
- Four detritors
- Storm separation and treatment
 - Overflow weir
 - Four rectangular storm tanks
 - Outlet weir and channels
- Primary treatment
 - Six radial primary settlement tanks of which only four are in use at any one time
- Secondary treatment by the activated sludge process
 - Feed pumping station
 - Activated sludge plant distribution chambers
 - Six aeration lanes with fine bubble diffused aeration of which only four are in use at any one time
 - Nine radial flow final settlement tanks (including one converted primary settlement tank)
- UV disinfection (only used in summer but has flow passing through year round)
- Outfall of secondary effluent and storm water to the Firth of Forth.

1.2.2 Sludge treatment

The sludge treatment plant includes:

- Imported sludge reception
 - Initial sludge reception tank
 - Second sludge reception tank
 - Sludge screen
 - Screenings skip
- Drum thickener for imported sludge thickening
- Three picket fence thickeners for thickening indigenous primary sludge
- Surplus activated sludge (SAS) storage tank
- Four belt thickeners for thickening SAS
- Thickened sludge storage tank for combined imported sludge, primary sludge and SAS
- Six anaerobic digesters
- Biogas storage and flare stack
- Digested sludge storage tank
- Three dewatering centrifuges
- Sludge cake storage building

1.2.3 Odour control

Various items of plant are contained within buildings or covered and connected to odour control units (See Appendix A). There are four odour control units.

The main odour control unit (Main OCU) (comprising two stage wet chemical scrubber and carbon filter, extraction system and vent stack to atmosphere) treats air extracted from:

- MEPS
- Inlet from Siphon House
- Screens and associated channels
- Channels to and from detritors (but not the detritors themselves)
- Channels distributing flow to primary tanks
- Channel taking storm flow to the storm tanks
- Primary settlement tank weirs and launder channels
- Channel taking settled sewage to the secondary treatment feed pumping station
- Activated sludge plant distribution chambers

OCU1 (comprising odour biofilter, extraction system and vent stack to atmosphere) treats air extracted from:

- The initial and second sludge reception tanks
- The picket fence thickeners

The digester OCU (comprising carbon filter, extraction system and vent stack to atmosphere) treats air extracted from:

- The digester limpet chambers

OCU2 (comprising odour biofilter extraction system and vent stack to atmosphere) treats air extracted from:

- Drum thickener
- SAS belt thickeners
- Thickened sludge storage tank
- Cake storage pad
- Centrifuge building

2 Methodology

2.1 General

In order to develop the odour inventory data was gathered through a combination of sampling from process units, and through conducting weekly sniff tests on site. Where sampling of minor emissions could not be justified, professional judgement was used to assume values for emissions.

In addition to the sampling work for the duration of the project Mott MacDonald participated in the monthly Odour Liaison meetings where issues relating to odour at Seafield are discussed by Scottish Water, Stirling Water, Veolia, CEC and SEPA. Mott MacDonald was also provided with the daily odour reviews provided by Veolia and with details of odour complaint investigations.

2.2 Sampling and analysis

Mott MacDonald subcontracted the sampling and analysis to Silsoe Odours Ltd to a programme developed by Mott MacDonald. This programme was reviewed following each sampling period in order to account for necessary changes resulting from operational conditions prevalent during the sampling periods. For example, sampling active emissions from the storm tanks was not possible during dry weather.

Silsoe Odours' laboratory is accredited by UKAS to undertake the determination of odour concentration measurement by dynamic dilution olfactometry required by BS EN 13725. The sampling is not covered by Silsoe Odours' UKAS accreditation. Silsoe Odours' report on the sampling survey is included within Appendix B.

For each sample point during a given survey three consecutive samples were taken and each individual sample analysed in accordance with BS EN 13725. The geometric means of the samples were used in developing the inventories. The samples were also analysed for hydrogen sulphide (H₂S) to protect the olfactometry panel from dangerous levels of H₂S. The data can also be used to determine whether and where measurement of H₂S can be used as a surrogate measurement for odour in future surveys

In addition to the bag samples taken from individual process units Odalog® monitors were installed in the suction side of Marine Esplanade Pumping Station and at the inlet chamber from the Siphon House to record hydrogen sulphide (H₂S) concentrations in the incoming sewage. This information can provide information concerning the generation of septic conditions in the catchment that could give rise to enhanced odour emissions at the inlet works.

2.3 Sniff tests

Each week Mott MacDonald attended site and carried out a sniff test. An extensive route around the site was followed covering all major processing areas. The route was varied from week to week to ensure that units were visited in different orders and from different directions. During the sniff tests various members of the teams from Scottish Water, Stirling Water and Veolia accompanied Mott MacDonald in order to understand the approach and validate the findings.

The sniff tests included the weather conditions, the strength and persistence of odours and where possible identification of the source of the odours. The approach varied slightly from the approach described in Technical Guidance Note IPPC H4 Horizontal Guidance for Odour Part 1 – Regulation and Permitting in that:

- No assessment of location sensitivity was made since all visited locations were within the treatment works.
- The extent of persistence was limited to whether the odour was constant or intermittent at the individual sniff test locations.
- No assessment of offensiveness was made since this is entirely subjective.

While the sniff tests were not specifically used to develop the inventory they helped shape the sampling programme. They were also a useful tool for identifying various housekeeping issues that required attention and provided a sense check on the results of the sampling and the inventory derived from the sampling results.

3 Sampling Programme

3.1 Proposed programme

Table 3.1 shows the proposed sample programme where an “x” indicates sampling to be undertaken.

Table 3.1: Initially proposed sample survey

Sample Location	Survey				
	1	2	3	4	5
Main OCU inlet	x	x	x	-	x
Main OCU outlet	x	-	x	-	x
Digester OCU inlet	x	x	-	x	x
Digester OCU outlet	x	-	-	x	x
OCU1 (Sludge Import/PFT OCU) inlet	x	x	x	-	x
OCU1 (Sludge Import/PFT OCU) outlet	x	-	x	-	x
OCU2 (Thickened sludge OCU) inlet	x	x	-	x	x
OCU2 (Thickened sludge OCU) outlet	x	-	-	x	x
Detritor	x	-	x	x	x
PST	x	-	x	-	x
Aeration Tank	x	x	-	x	-
FST	x	-	x	x	-
Digested sludge storage tank	x	x	x	-	-
Storm tanks	-	x	-	x	x
Marine Esplanade Pumping Station	-	x	-	x	x
Siphon chamber inlet	-	x	x	-	x
SAS tank	-	x	x	x	-
Sludge cake building	-	x	x	x	-
Sludge import area	-	x	x	x	-
Inlet screens building	-	x	x	x	-

3.2 Actual programme

For various reasons the initial programme was modified over the course of the surveys. These reasons included:

- The start of the survey period was warm and with low rainfall meaning that the storm tanks were clean and empty when a sample was due to be taken.
- Recognition that the odour release varied along the length of the aeration tanks and that a single sample point would not adequately define the emissions.
- Identification of an additional sampling location at the FST distribution chamber.
- Observing little variability in measured conditions in the inlet screens building and digested sludge storage tank.
- Observing significant variability in measured conditions at the siphon inlet.

Table 3.2 shows the actual sample survey programme undertaken.

Samples were taken at various locations along the length of the aeration tanks to reflect the reduction in odour emissions along the length of the tank.

Numbers in brackets indicate multiple samples and in particular the number of sampling locations. Access to the aeration lanes restricted the number of locations from where samples could be taken.

Table 3.2: Actual odour inventory sampling locations

Sample Location	06/07 June	26/27 June	23/24 July	Survey	
				21/22 August	12/13 September
Main OCU inlet	x	x	x	-	x
Main OCU outlet	x	-	x	-	x
Digester OCU inlet	x	x	-	x	x
Digester OCU outlet	x	-	-	x	x
OCU1 (Sludge Import/PFT OCU) inlet	x	x	x	-	x
OCU1 (Sludge Import/PFT OCU) outlet	x	-	x	-	x
OCU2 (Thickened sludge OCU) inlet	x	x	-	x	x
OCU2 (Thickened sludge OCU) outlet	x	-	-	x	x
Detritor	x	x	-	x	-
PST	x	-	-	x	x
Aeration Tank	x	x (2)	x (2)	x (3)	-
FST	x	-	-	x	-
Digested sludge storage tank	x	x	-	-	-
Storm tanks	-	-	x	x	x
Marine Esplanade Pumping Station	-	x	x	-	x
Siphon chamber inlet	-	x	x	x	x
SAS tank	-	x	x	-	-
Sludge cake building	-	x	x	-	x
Sludge import area	-	x	x	-	-
Inlet screens building	-	x	x	-	-
FST distribution chamber	-	-	-	x	-

4 Review of data collected

4.1 Bag sampling

4.1.1 Results

The full report by Silsoe Odours Ltd detailing the survey and the analytical results is included in Appendix B. A summary of the data is presented in Table 4.1 below. The values shown are the geometric means of the triplicate samples taken at each location.

Table 4.1: Sampling survey results

Sample Location	Odour concentrations (OU _E /m ³) ¹				
	06/07 June	26/27 June	23/24 July	21/22 August	12/13 September
Main OCU inlet	4,045	1,286	4,180	-	3,898
Main OCU outlet	0	-	135	-	101
Digester OCU inlet	2,202	12,389	-	8,071	38,380
Digester OCU outlet	0	-	-	0	0
OCU1 (Sludge Import/PFT OCU) inlet	32,344	26,708	71,455	-	237,352
OCU1 (Sludge Import/PFT OCU) outlet	79	-	1,219	-	12,118
OCU2 (Thickened sludge OCU) inlet	11,186	13,658	-	45,305	33,218
OCU2 (Thickened sludge OCU) outlet	24	-	-	15,986	10,810
Detritor	1,558	1,654	-	2,497	-
PST	1,571	-	-	223	73
Aeration Tank					
Inlet	-	-	5,973	1,617	-
Central walkway (1/6 th of tank length)	-	3,970	239	6,433	-
End of first pass (1/3 rd of tank length)	87	86	-	390	-
FST	48	-	-	50	-
Digested sludge storage tank	822	539	-	-	-
Storm tanks	-	-	56	767	103
Marine Esplanade Pumping Station	-	1,618	4,003	-	4,975
Siphon chamber inlet	-	3,794	40,445	1,237	1,590
SAS tank	-	183	384	-	-
Sludge cake building	-	10,124	17,495	-	4,170
Sludge import area	-	34,129	31,405	-	-
Inlet screens building	-	62	54	-	-
FST distribution chamber	-	-	-	1,379	-

¹ A value of 0 indicates that a sample was taken and the odour concentration was below the level of detection for the panel during the olfactometry assessment. Where the value is shown as "-" no samples were taken at that location on that occasion.

4.1.2 Analysis of results

The variability in emission rates is of interest particularly from those process units and locations from where there is normally a constant rate of extraction such as the odour control unit serving the digester and OCUs 1 and 2. This would seem to indicate a significant variation in the rate of odour release from the source. No obvious causes of this variability could be identified from site data.

4.1.2.1 OCU2

The performance of OCU2 shows significant deterioration (in terms of percentage removal) in the fourth and final surveys; however the change in inlet odour concentration from the first survey indicates that the plant is removing more odour overall during the later surveys. At least part of the reason for the reduction in performance during these surveys may be attributed to a temporary partial failure of the water distribution system within OCU2.

Veolia reported that this failure led to part of the media being inadequately wetted and leading to a reduction in the effective treatment capacity. Further, Veolia reported that modifications made to the internal structure of the cake pad building, to reduce the risk of external spillage causing odour emissions, had resulted in sludge being stored in the corner of the building directly beneath the extraction pipework for much longer than normal causing the sludge to become more odorous. This could contribute to the higher odour concentrations observed. The general odour emissions from the cake building were relatively low during the final survey, possibly because the inventory of sludge within the building had been reduced to minimise odour emissions.

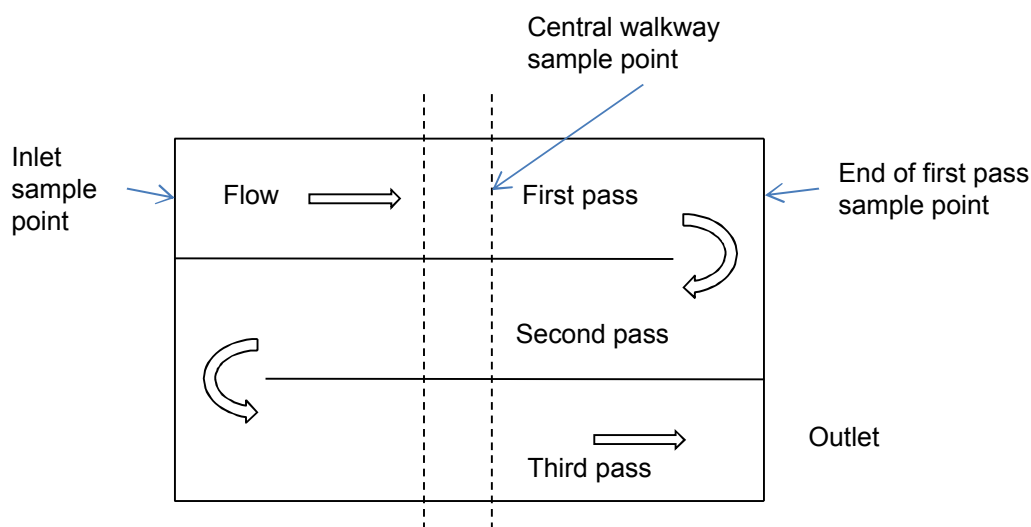
The percentage removal of odour in the fourth and final surveys was much less than the minimum 95% required by the CoP; however because the unit was installed prior to 22 April 2006 The Sewerage Nuisance (Code of Practice) (Scotland) Order 2006" (CoP) only requires an equipment upgrade if the unit is causing an odour nuisance. There is no evidence to suggest that OCU2 was causing a nuisance at this time.

The deterioration in performance and the subsequent actions that the Operator had taken to rectify this were discussed during the October 2013 Odour Liaison Meeting.

4.1.2.2 Aeration lanes

Further commentary is warranted on the various locations within the aeration tanks at which samples were taken. Each aeration lane comprises three passes, as indicated in Fig 4.1. Three sampling locations were identified within the aeration lane. The first was at the inlet to the tank, listed as "Inlet" in Table 4.1. The second was from the central walkway within the first pass, listed as "Central walkway" in Table 4.1. This second location is halfway along the first pass, which is 1/6th of the way along the entire aeration tank. The third location was from the walkway at the end of the first pass of the aeration tanks, listed as "End of first pass" in Table 4.1, which is 1/3rd of the way along the entire aeration tank. A diagram detailing this arrangement is shown in Figure 4.1.

Figure 4.1: Aeration lane configuration and sampling locations



Sampling within the second and third passes was not considered necessary because previous experience indicates that the odour emission does not reduce significantly after the first third of the aeration tank.

Profiling of the aeration lanes appears to indicate a variation in odour release along the length of the aeration lane. While the highest concentrations are observed towards the beginning of the lane the point at which the highest concentration is observed appears to vary. This is to be expected as the incoming BOD load and the available DO varies. See section 4.3 for further details.

4.1.2.3 H₂S and odour correlation

An initial review of the relationship between H₂S concentration and odour concentration has been undertaken. While this seems to suggest that there is good correlation between the two parameters there is some variability across the various stages of the process. A more detailed study involving further sampling and odour and H₂S measurements at each process stage would be required to confirm the relationships and what levels of H₂S from each process unit is likely to require operator intervention in order to prevent an odour nuisance. The initial analysis is presented in Appendix C.

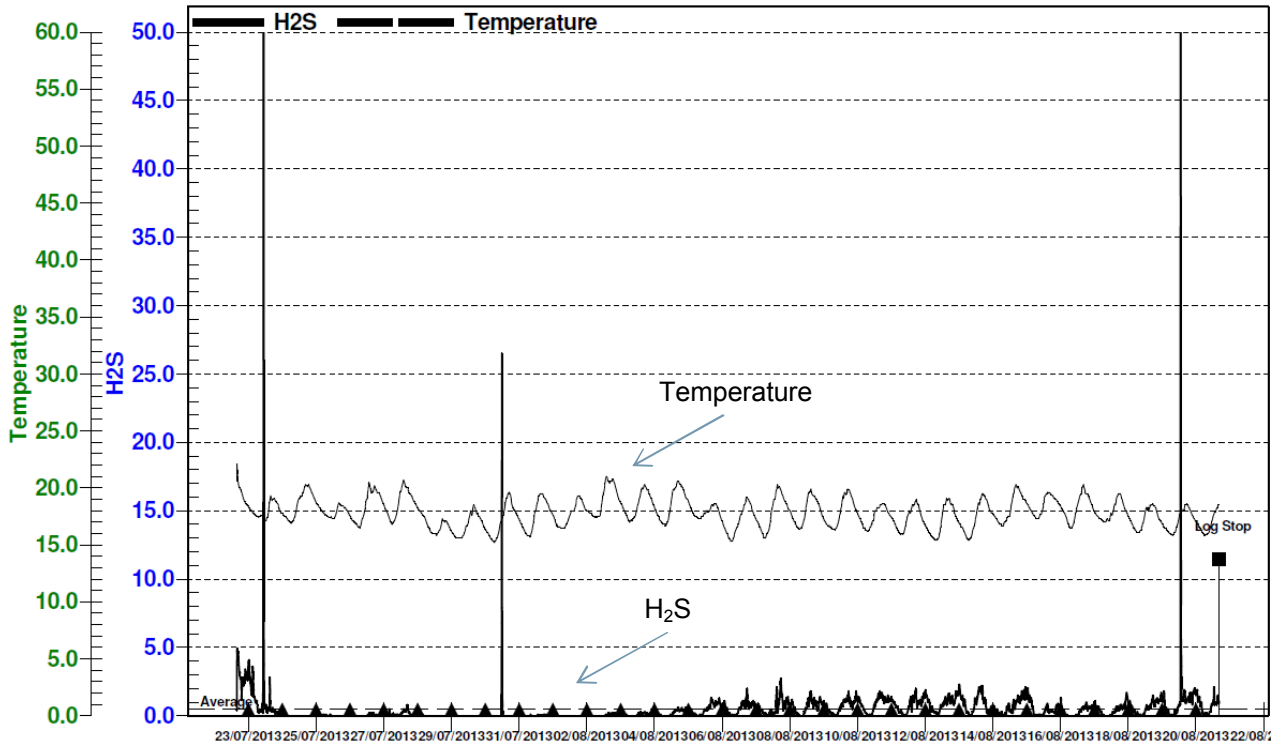
4.2 Inlet hydrogen sulphide monitoring

4.2.1 Results

The full results of the inlet H₂S monitoring are shown in Silsoe Odours' report in Appendix B.

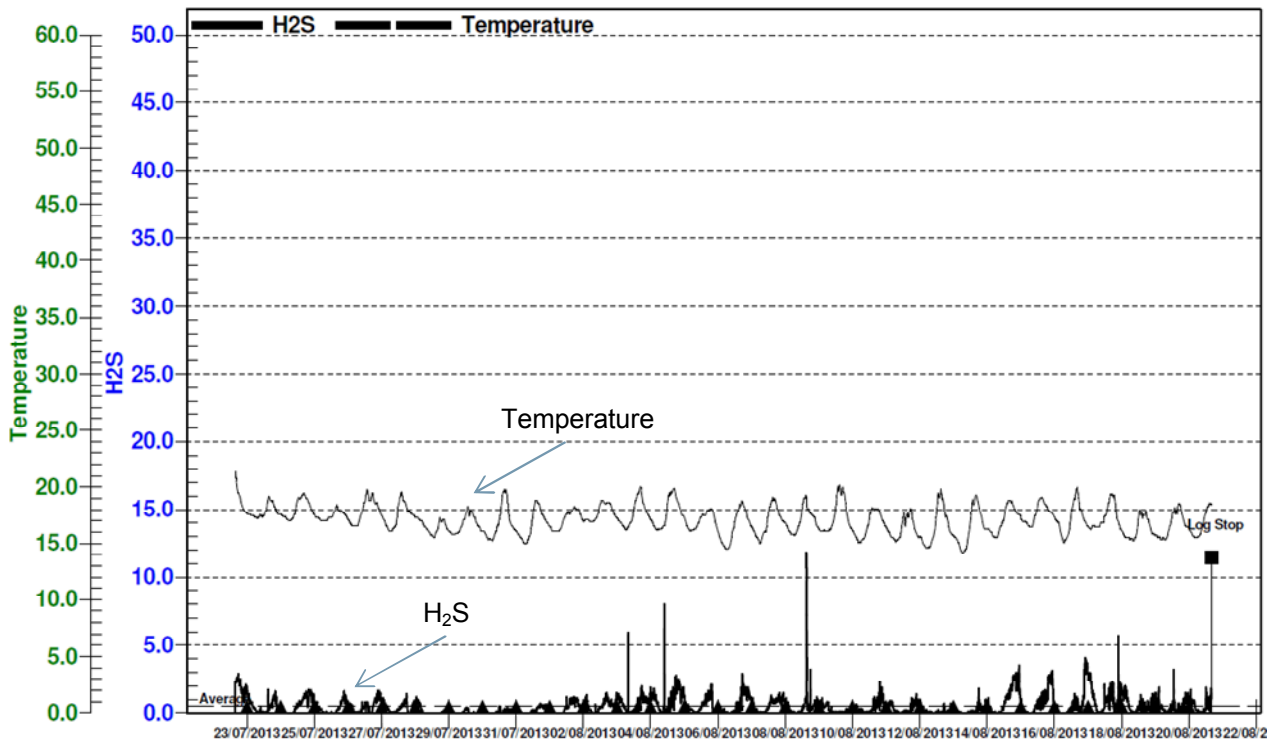
An example plot from the siphon inlet H₂S monitor is shown in Figure 4.2. This shows a distinct diurnal profile with periodic high level, short duration spikes in concentration.

Figure 4.2: Siphon inlet H₂S monitoring results



An example plot from the Marine Esplanade Pumping Station inlet H₂S monitor is shown in Figure 4.3. This also shows a distinct diurnal profile but with much lower spikes in concentration observed than at the siphon inlet.

Figure 4.3: Marine Esplanade Pumping Station inlet H₂S monitoring results



4.2.2 Analysis

Aside from the spikes in H₂S, the inlet profiles are typical for a primarily domestic sewage catchment with little or no saline intrusion where the H₂S concentration is linked to the strength of the incoming sewage. The weather conditions during the survey period were predominantly warm and dry during the survey leading to low incoming flows and generally higher sewage concentrations. It is therefore, possible that the H₂S concentrations are consequently elevated.

It seems likely that the spikes are caused by a plug of something in the influent sewage such as saline intrusion or trade effluent discharges. While an attempt has been made to correlate the spikes observed at the siphon inlet with tidal conditions or trade effluent discharges nothing is apparent. The spikes do not coincide with odour complaints and Veolia has reported that the spikes do not show up at the H₂S monitor permanently installed at the works inlet.

The monitors were installed during the first of Silsoe Odour’s surveys and the data from the monitors was downloaded by Silsoe Odours after each subsequent sampling survey. Both installed monitors were changed for new monitors during the second survey, for reasons not related to the data being obtained. The new monitors showed similar patterns to the original monitors.

4.3 Sniff tests

The outputs from the sniff tests do not readily lend themselves to collation or presentation however general trends and observations can be reported.

The most pervasive odours detected i.e. those that could most readily be detected away from their point of release were from the primary tanks i.e. the sludge cake storage building. The odours from the sludge cake building were generally only detectable when the door was open.

The strongest odours observed in the immediate vicinity of the source were from the skips containing the fine screenings from the inlet and the sludge screening (both imported and indigenous sludge). The odours from these skips were undetectable except when within a few metres of the skips.

There was generally very little odour in the vicinity of the works' inlets.

The only location around the covers provided as part of Seafield Odour Improvement Project where odour was detected during the sniff tests was in the vicinity of the fine screens. It is worth noting that there was also odour detected in the vicinity of the primary tanks however this is believed to originate from the uncovered surface rather than the covered sections.

The aeration tanks were covered in bacteriological foam, reported to result from the growth of *Nocardia* sp. in the activated sludge. Sodium hypochlorite, an anti-foaming agent and poly aluminium chloride were being added throughout summer 2013 in an attempt to control the foaming. The odour from the activated sludge tank was on occasions slightly stale and site data indicated that the dissolved oxygen concentration was very low on occasions. This may indicate that the biomass not being sufficiently aerated; however the final effluent still met the requirements of its discharge licence throughout the summer 2013 period.

A faint bleach-like chemical odour could sometimes be detected in the immediate vicinity of the Main OCU; otherwise no odours were detected from the odour control units. It is likely odour from the Main OCU is from the sodium hypochlorite added as part of the odour treatment process. Sodium hypochlorite was also being added to the activated sludge process but the bleach-like smell was not detected anywhere in the vicinity of the aeration tanks giving further certainty that the source was the Main OCU .

One sniff test was conducted in parallel with the regular site walk round by one of the Odour Technicians. The focus of the Odour Technician was primarily on ensuring that the equipment was as it should be (for example ensuring covers were in place, extraction fans were operating, identifying any spillages or maintenance requirements). The assessment was quite mechanistic and there did not appear to be much time spent on reflecting on the odours arising from the site and how these compared to the normal situation.

5 Odour Emissions Inventory

5.1 Baseline inventory

The baseline scenario takes into account odour emissions generated from the current operations and existing equipment at the site and provides a benchmark for comparison with the odour impacts for other scenarios.

Baseline odour emission rates were generally derived from average odour emission rates measured in the survey. Where data were not available these have been estimated based on Mott MacDonald's experience elsewhere.

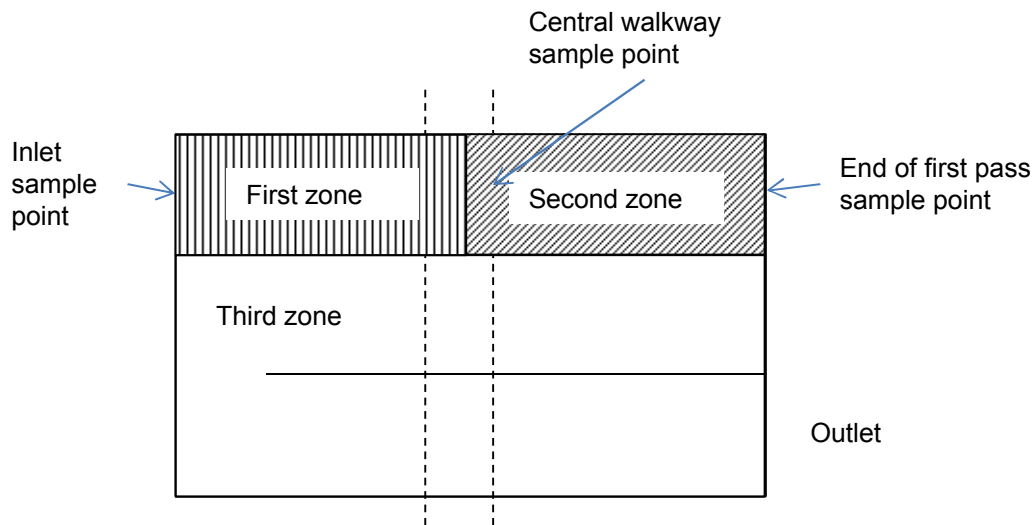
In the baseline case, the following has been assumed:

- All process units normally in operation are in service and operating normally
- All odour control systems extracting and treating extracted air to remove a minimum of 95% of incoming odour.
- All storm tanks clean and empty.
- All covers are in place
- Doors on sludge treatment buildings are closed
- Complete biogas combustion – hence not odorous
- Pressure relief valves on sludge digesters not activated

For the purpose of calculating the aeration tank emission rates the tanks were assumed to be split into three zones. The first zone was from the inlet to the central walkway in the first pass. The second zone was from the central walkway to the end of the first pass. The third zone was deemed to be the final two passes. The emission rates for the first and second zones were calculated from the mean of the inlet and outlet samples from each zone ie for the first zone the emission rate was calculated from the mean of the "Inlet" and "Central walkway" samples and for the second zone the emission rate was calculated from the mean of the "Central walkway" and "End of first pass" samples.

The sampling locations and how these relate to the aeration tank zones for calculating emission rates is shown in Figure 5.1.

Figure 5.1: Aeration lane sampling locations and zones



The mass balance from which the odour emissions inventory has been derived is detailed in Appendix D. The baseline odour emissions inventory is shown in Table 5.1.

Of the total odour emissions from the site, 39% (59,598 OU_E/s) are from the aeration lanes 35% (53,997 OU_E/s) are from the primary sedimentation tanks and 9% (13,403 OU_E/s) are from the detritors. These values show that during baseline conditions 83% of the odour load originates from three odour sources.

Table 5.1: Seafield STW baseline odour inventory

Odour source	No of units	Total emission area m ²	Emission rate OU _E /m ² .s	Odour load OU _E /s	Emissions measured/assumed	Comments
Coarse screen skips (screenhouse)	2	12	1	12	Assumed	Washed screenings
Fine screen skips (screenhouse)	4	24	64	1,539	Assumed	Emission rate includes for 40% reduction due to covers
Fine screen skips (outside screens)	3	18	64	1,154	Assumed	Emission rate includes for 40% reduction due to covers
Coarse screen skips (outside screens)	3	18	1	18	Assumed	Washed screenings
Detritors	4	1,003	13.4	13,403	Measured	Based on first two surveys since some units out of operation in subsequent survey
Grit skips	4	24	1	24	Assumed	Equal to coarse screenings emission rate
Storm tanks	4	12,000	0.44	5,280	Assumed	Empty with background emission rate assumed equal to final settlement tanks emission rate
Storm tanks distribution channel	1	454	0.44	200	Assumed	Emission rate equal to storm tanks
Storm overflow channel	1	451	0.44	199	Assumed	Emission rate equal to storm tanks
Primary sedimentation tanks	4	9,677	5.6	53,997	Measured	
Aeration lane – First zone	4	1,006	30.3	30,521	Measured	
Aeration lane – Second zone	4	1,006	14.9	14,995	Measured	
Aeration lane – Third zone	4	4,023	3.5	14,082	Measured	
Final effluent channel	1	782	0.44	344	Assumed	Emission rate equal to final settlement tanks emission rate
Final effluent UV channel	1	322	0.44	142	Assumed	Emission rate equal to final settlement tanks emission rate
Final sedimentation tank distribution chamber	2	37	12.4	458	Measured	

Table 5.1 continued overleaf.

Table 5.1: Seafield STW baseline odour inventory (continued)

Odour source	No of units	Total emission area m ²	Emission rate OU _E /m ² .s	Odour load OU _E /s	Emissions measured/assumed	Comments
Final sedimentation tanks	8	11,376	0.44	5,005	Measured	
Final sedimentation tank (converted PST)	1	2,419	0.44	1,064	Measured	
SAS balancing tank	1	98	2.5	248	Measured	
Digested sludge holding tank	1	380	5.7	2,176	Measured	
Primary sludge screenings skip	1	6	106.9	641	Assumed	From previous surveys on other sites
Imported sludge screenings skips	2	12	106.9	1,283	Assumed	From previous surveys on other sites
OCU 1	1	-	-	3,095	Measured	
OCU 2	1	-	-	1,428	Measured	
Main OCU	1	-	-	919	Measured	
Digester OCU	1	-	-	6	Measured	
Total				152,234		

5.2 Impact of non-routine events on inventory

The impact on odour emissions on a number of non-routine events has been assessed. The events identified, which the survey results could be used to assess, were:

- A reduction in the performance of OCU1
- A reduction in the performance of OCU2
- Storm water contained within the storm tanks
- Sludge cake storage building door left open²

A period of reduced removal efficiency by OCU2 occurred during the survey period and there were also periods where the storm tanks were in operation. During the survey period there were no periods of reduced removal efficiency by OCU1 and, apart from routine usage, there was no occasion during the survey period where the sludge cake storage building was left open for extended periods of time.

² The sludge treatment at Seafield is being modified in 2013 and 2014 to provide enhanced anaerobic digestion in the form of thermal hydrolysis. As part of this project the existing sludge cake storage building will be disconnected from OCU2 and the air from the cake pad building will be extracted to a new odour control unit. No allowance has been made for this as part of the development of this inventory. Once connected to the new odour control unit it is understood that the ventilation rate will increase and reduce the likelihood of fugitive emissions from the cake pad building, even with the door open. Again no allowance has been made for this.

5.2.1 Reduced performance of OCU1

In this scenario it is assumed that the performance of the biological treatment in OCU1 has reduced for some reason such as loss of the wetting system. It is assumed that the associated fans are still extracting air from the picket fence thickeners and the imported sludge storage tanks and therefore the odour would be dispersed into the atmosphere from the stack.

OCU1 has a measured average inlet concentration of 91,965 OU_E/m^3 along with an air flow of 2,491 m^3/h . If treatment within the odour control unit were to fail completely, an odour load of 63,640 OU_E/s is estimated to be released from the stack.

Total failure of treatment is unlikely hence a partial reduction in treatment performance and the worst case emissions measured during the survey have also been considered. The impact of the various scenarios is presented in Table 5.2.

Table 5.2: Impact of reduced performance of OCU1 on baseline emissions

Scenario	Odour removal	Odour load from OCU1 (OU_E/s)	Total odour load from site (OU_E/s)	Odour increase above baseline
Baseline from OCU1	>95%	3,095	152,234	0%
Partial reduction in treatment performance	50%	31,817	180,956	19%
Total treatment failure	0%	63,640	212,779	40%
Worst case during survey	92%	4,964	154,103	1%

5.2.2 Reduced performance of OCU2

In this scenario it is assumed that the performance of the biological treatment in OCU1 has reduced for some reason such as loss of the wetting system. This actually occurred during the sampling period. It is assumed that the associated fans are still extracting air from the all the various sludge treatment locations from which they currently extracts² and therefore the odour would be dispersed into the atmosphere from the stack.

OCU2 has a measured average inlet concentration of 25,842 OU_E/m^3 along with an air flow of 4,792 m^3/h . If treatment within the odour control unit were to fail completely, an odour load of 34,399 OU_E/s is estimated to be released from the stack.

Total failure of treatment is unlikely hence a partial reduction in treatment performance and the worst case emissions measured during the survey have also been considered. The impact of the various scenarios is presented in Table 5.3.

Table 5.3: Impact of reduced performance of OCU2 on baseline emissions

Scenario	Odour removal	Odour load from OCU2 (OU _E /s)	Total odour load from site (OU _E /s)	Odour increase above baseline
Baseline from OCU2	>95%	1,428	152,234	0%
Partial reduction in treatment performance	50%	17,200	168,006	10%
Total treatment failure	0%	34,399	185,205	22%
Worst case during survey	40%	20,700	171,506	13%

5.2.3 Storm tank usage

In the base scenario (storm tanks empty), all horizontal surfaces in contact with the storm water are estimated to emit a background odour of 0.44 OU_E/m².s (equal to the final effluent emission rate). Survey results for storm water give an average surface emission rate of 2.66 OU_E/m².s, which increases the average odour load from the storm tanks to 34,328 OU_E/s during storm conditions.

The highest surface emission rate measured during the survey was obtained while the storm tanks had been drained and were awaiting cleaning. This scenario has also been considered. The impact of the various scenarios is presented in Table 5.4.

Table 5.4: Impact of storm tanks on baseline emissions

Scenario	Odour emission rate from storm tanks (OU _E /m ² .s)	Odour emission rate from storm tanks (OU _E /s)	Total odour emissions from site (OU _E /s)	Odour increase above baseline
Baseline from storm tanks	0.44	5,280	152,234	0%
Average from storm tanks	2.66	34,328	181,282	19%
Worst case during survey	6.9	89,046	236,000	55%

It was noted that there is a procedure within the site Odour Management Plan for emptying storm tanks that requires that the storm tanks contents be returned as soon as possible to prevent the contents becoming odorous. There is also a requirement to clean the storm tanks when the wind is blowing offshore. The significant increase in the overall odour produced by the site indicates the validity of the approach detailed within the Odour Management Plan.

5.2.4 Cake pad open door

The cake storage building is a potential odour source with high odour concentrations inside the building. Due to frequent truck movement the vehicle access door to the building is opened frequently. There is no air lock to prevent odours escaping from the building. The site Odour Management Plan requires that the cake pad door only be open during entry and exit of vehicles from the cake pad building but as this is an automatic operation on entry and a manual operation on exit the door could conceivably be left open for extended periods.

The average cake pad odour concentration measured during the survey was 10,837 OU_E/m^3 .

The key assumption for assessment of the impact of the door being open is the air exit velocity. This will be dependent on a number of different factors including wind direction, the temperatures inside and outside the building and the pressure difference between the inside and outside of the building. The impact of a range of exit velocities is presented in Table 5.5. The mass balance within Appendix D assumes an exit velocity of 0.5m/s.

Table 5.5: Impact of cake pad door opening on baseline emissions

Exit velocity (m/s)	Odour emission rate from cake pad (OU_E/s)	Total odour emissions from site (OU_E/s)	Odour increase above baseline
0 (Baseline – door closed)	0	152,234	0%
0.1	27,093	179,327	18%
0.25	67,731	219,965	44%
0.5	135,463	287,697	89%

The results above validate the approach set out in the Odour Management Plan since there could be a substantial release of odour from the sludge cake building if the door is left open for an extended period of time

6 Conclusions

Summer 2013 was predominantly warmer and drier than those preceding it. Consequently the incoming wastewater was of generally of higher concentration and lower volume than during a typical summer. It is likely that this has caused higher odour emissions from the treatment works; however there is no sample data from previous available for comparison.

The baseline inventory identifies a range of emissions from Seafield STW. The largest sources of emissions are:

- Detritors (9% of total baseline emissions)
- Primary settlement tanks (35% of total baseline emissions)
- Aeration tanks (39% of total baseline emissions)

Emissions from the final settlement tanks (4%) and OCU1 (2%) also contribute a significant proportion of the total baseline emissions from the site. The remainder of the emissions comes from minor sources around the site.

The impacts of four non-routine events on the baseline were assessed, namely:

- A reduction in performance of OCU1
- A reduction in performance of OCU2
- Storm water contained within the storm tanks
- Sludge cake storage building door left open

Each of these non-routine events leads to an increase in the average odour load from the site.

The impact of the storm tanks is related to the point in the storm tank operational cycle with highest emissions being recorded during storm tank cleaning where the odour emissions increase above the base load by 55% compared to an average increase of 19% when the tanks contain storm water.

The performance of OCU2 during the final two surveys indicated that the unit was not able to meet the 95% odour removal required by the CoP; however because the unit was installed prior to 22 April 2006 the CoP only requires an equipment upgrade if the unit is causing an odour nuisance. There is no evidence to indicate that the reduced performance of the unit caused an odour nuisance. The reduced performance appears to have been at least partially as a result of temporary mechanical failure and may not be representative of normal performance. VWOL has subsequently addressed the mechanical failure.

7 Recommendations

The findings of this study should be used to inform future discussions between Scottish Water and CEC. The findings should also be used to inform future revisions of the Odour Management Plan for Seafield.

The reason for the H₂S spikes observed at the siphon inlet should be investigated further by Scottish Water with a view to preventing these recurring. While these spikes do not correlate with complaints and the Main OCU appears able to treat any increase in load, the additional loads could lead to higher downstream emissions eg from the detritors and primary settlement tanks.

The on-going performance of OCU2 should be monitored to determine the range of inlet odour concentrations and whether they fall within the design capacity of the OCU. Cognisance should also be taken of the fact that the cake pad building, which is a major contributor to the odour load to OCU2, is to be connected to a new odour control unit as part of the thermal hydrolysis project and thus the load to OCU2 will reduce.

Consideration should be given to Operator or the Concessionaire continuing the sniff tests, perhaps including visiting locations beyond the site boundary, so that Veolia and Stirling Water get an ongoing appreciation of the changes in odour arising from the various process units to supplement the walks round site currently undertaken by the Odour Technicians.

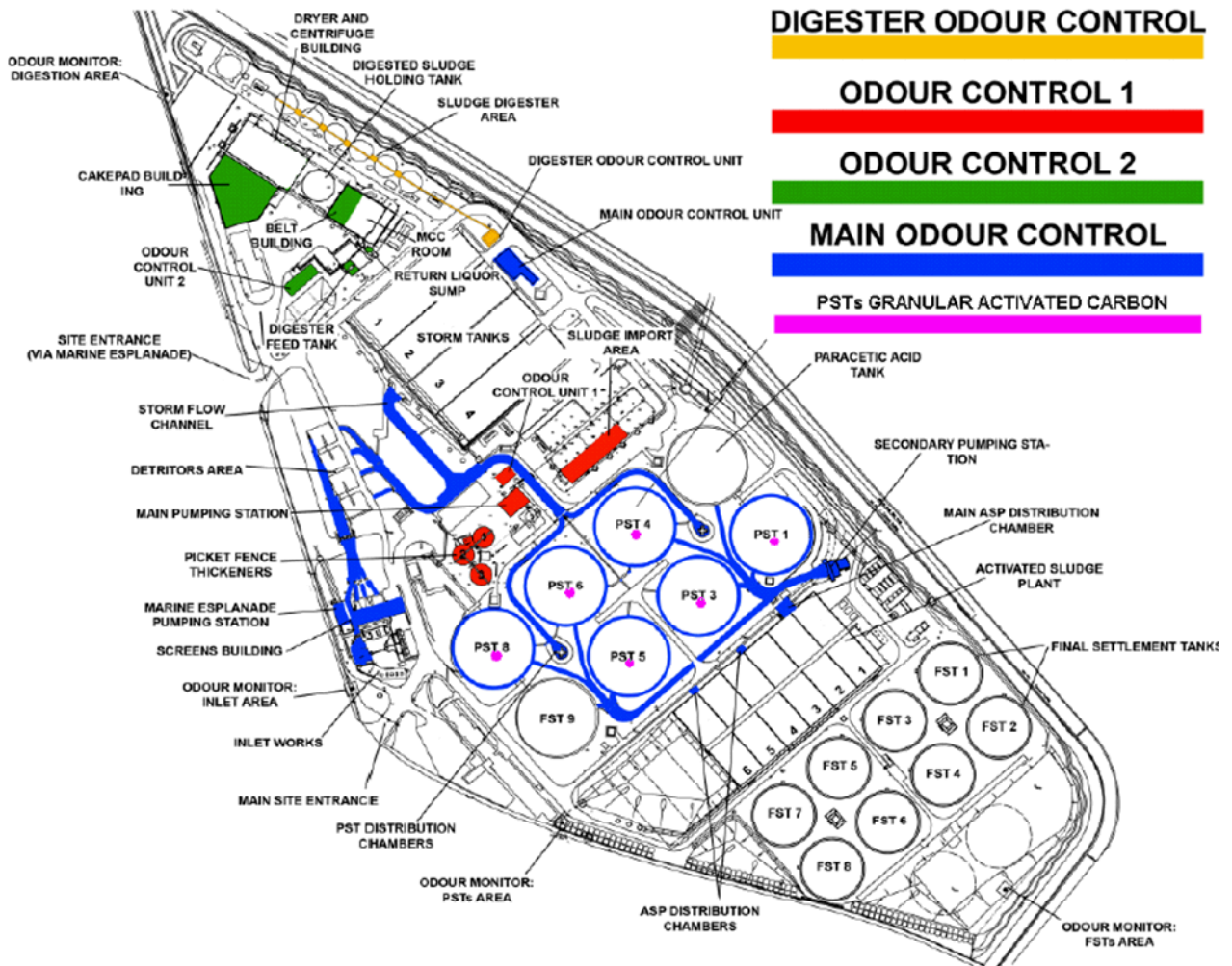
An initial review suggests that there is a reasonably good correlation between H₂S concentration and odour concentration from the various process units. There may be an opportunity to use H₂S monitoring as a surrogate for odour; however a greater level of understanding of the relationships for individual process units, is required including the identification of threshold levels to indicate when operator intervention might be required.

Appendices

Appendix A. Site Layout	24
Appendix B. Silsoe Odours Ltd Report	25
Appendix C. H ₂ S and Odour Correlation	86
Appendix D. Mass Balance	89

Appendix A. Site Layout

Figure A.1: Site layout showing odour control areas



Source: Odour Management Plan, Seafield WWTW, Issue 2 Version 4, Veolia Water Outsourcing Ltd., April 2013

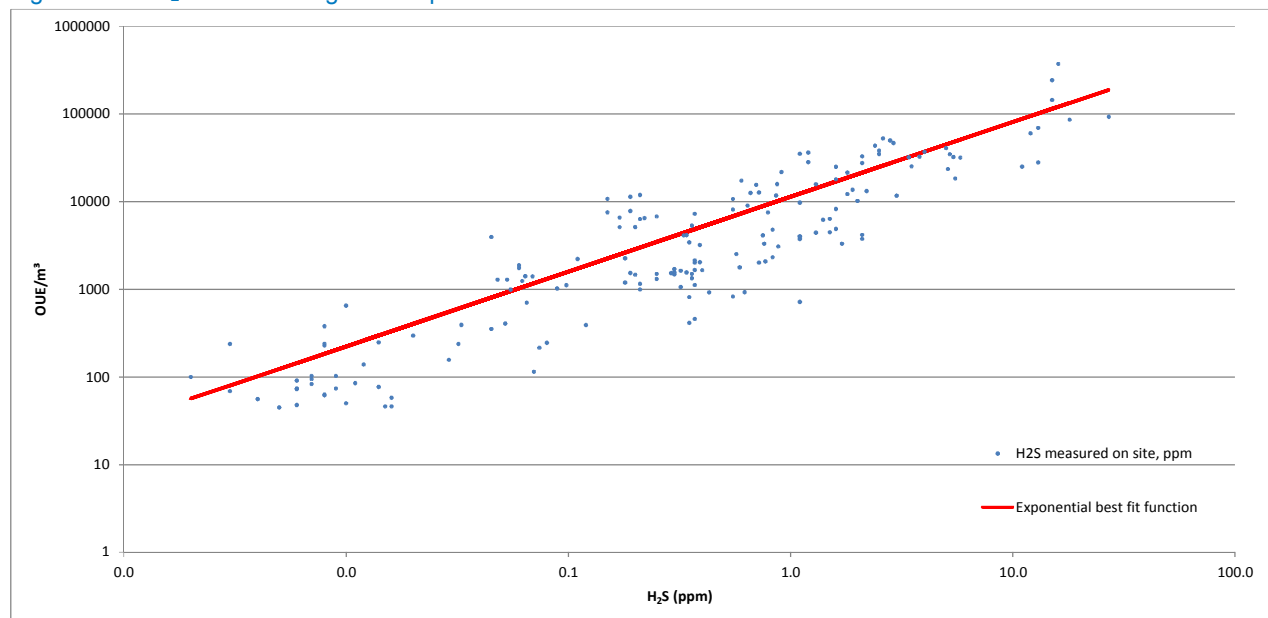
Appendix B. Silsoe Odours Ltd Report

Appendix C. H₂S and Odour Correlation

During the survey, each sample was analysed for both odour and H₂S concentration. An attempt has been made to capture a relationship between the two parameters to indicate whether H₂S could be measured to provide a reliable indication of odour concentration.

The measured data has been plotted in the following figures with H₂S on logarithmical horizontal axes and odour on logarithmical vertical axes.

Figure C.1: H₂S vs Odour logarithmic plot for all data



The graph in Figure C.1 fits an exponential curve through the data with the equation shown below:

$$\text{Odour} = 11,388 \times H_2S^{0.85}$$

It is unusual for data from such different areas of the sites to fit so neatly into a single curve since the characteristics of sludge, raw sewage and secondary treated sewage are so different therefore the data has been separated into sludge, sewage and aeration lane measurements. These are shown in Figure C.2 to Figure C.4. The categories are each plotted with H₂S on the horizontal axes and odour on the vertical axes. When separated into the individual categories the relationships are less clear and indicate that more data is required to be certain whether a relationship truly exists.

Figure C.2: H₂S vs Odour logarithmic plot for sludge

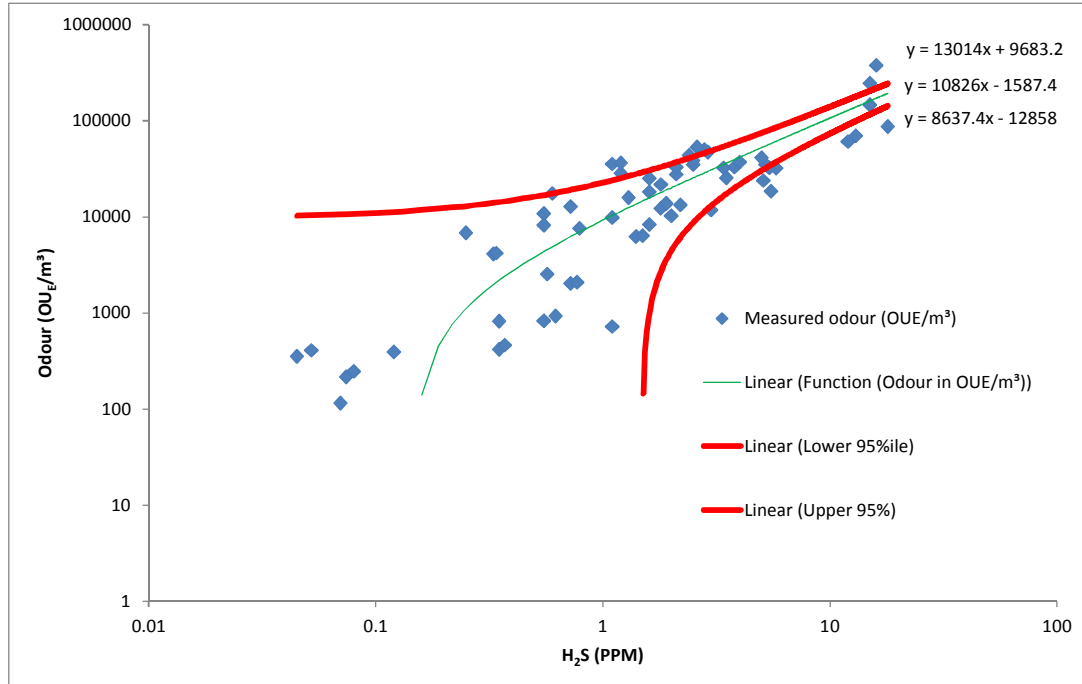


Figure C.3: H₂S vs Odour logarithmic plot for sewage

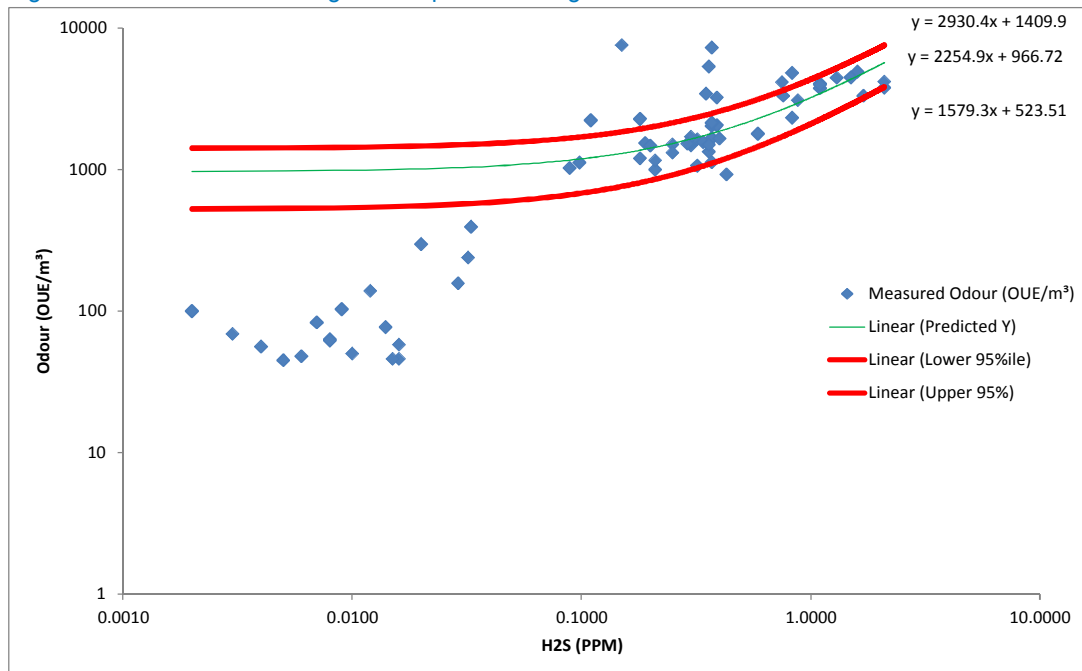
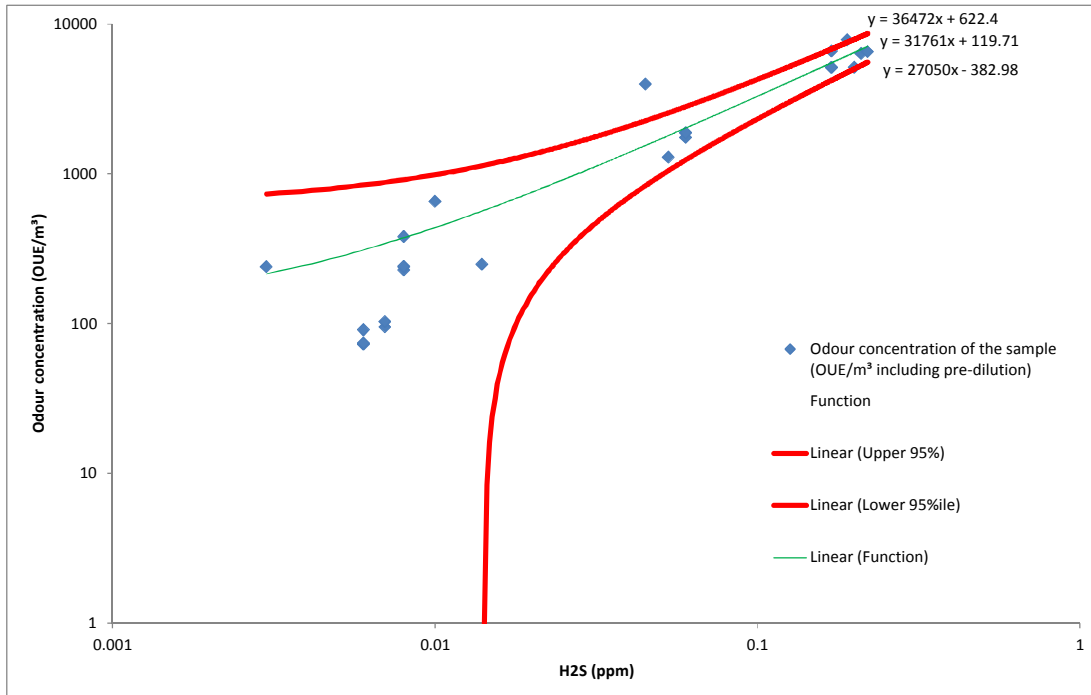


Figure C.4: H₂S vs odour logarithmic plot for aeration lane



Appendix D. Mass Balance

D.1 Mass balance and assumptions

Figure D.1: Odour sources, assumptions, dimensions and emission rate calculations

Site layout ref. number	Process units	Dimensions										Ventilation			Emission from plant			Removal			Comment
		No.	Length m	Width m	Diameter m	Structure height m	Weir drop m	Area per unit m ²	Total area (All units) m ²	Total volume (All units) m ³	Source elevation wrt ground m	Enclosed	Ventilated to scrubber	Air rate from ventilation (All units) m ³ /hr	Model As:	Odour potential or concentration OU _g /m ³	Specific odour emission rate OU _g /m ² .s	Total odour emission rate (All units) OU _g /s	Scrubbed OU _g /m ³	Removal %	
Preliminary treatment																					
17	Inlet screw pumps (Marine Esplanade Pumping Station)												Yes	Yes							-
16	Inlet syphon												Yes	Yes							-
29	Diversion structure & additional inlet structure												Yes	Yes							-
1	Screenhouse	1	33.5	10.0		10		3350				Yes	Yes	Silsoe survey data	48						-
	Coarse screen skips (screenhouse)	2	3.0	2.0		1.5	6	12	1.5	No	No			Estimated emission		1.00	12			12	Dimensions estimated
	Fine screen skips (screenhouse)	4	3.0	2.0		1.5	6	24		Yes	No			Estimated emission	11896	106.9	2,565	40		1,539	Estimated dimensions, low emission rate because screenings are washed
	Fine Screens (outside)									Yes	Yes										-
	Fine screen skips (outside screens)	3	3.0	2.0		1.5	6	18		Yes	No			Estimated emission	11896	106.9	1,924	40		1,154	
	Course screens (outside)	2								Yes	Yes										-
	Course screen skips (outside screens)	3	3.0	2.0		1.5	6	18	1.5	No	No			Estimated emission		1.00	18			18	Estimated dimensions, low emission rate because screenings are washed
	Channels from inlet to primary									Yes	Yes										-
2	Detritor	4	16.5	15.2		0	250.8	1003	0	No	No			Silsoe survey data	1606	13.36	13,403			13,403	
	Grit classifiers	4	3.0	2.0		1.5	6	24	1.5	Yes	No			Estimated emission							-
	Grit skips	4	3.0	2.0		1.5	6	24	1.5	No	No			Estimated emission		1.00	24			24	Assumed all skips to be of the same dimension
	Channels to storm									Yes	Yes										-
	Storm tanks distribution channels					0	454	454		No	No			Silsoe survey data	309	0.44	200			200	
5	Storm tanks	4	100.0	30.0		0	3000	12000		No	No			Silsoe survey data	309	0.44	5,280			5,280	
	Storm overflow channels		122.0	3.7		0	451	451		No	No			Silsoe survey data	309	0.44	199			199	
13	Grit washing mashine (OUT OF SERVICE)																				-
Primary and secondary treatment																					
	Channel from detritor to primary tanks											Yes	Yes								-
	Primary sedimentation distribution chambers	2								Yes	Yes										-
	Primary sedimentation tanks weir drop	4								Yes	Yes										-
4	Primary sedimentation tanks	4			55.5	0	2419	9677		No	No			Silsoe survey data	622	5.58	53,997			53,997	
	Channels from primary tanks to secondary treatment PS									Yes	Yes										-
	ASP distribution chambers	3								Yes	Yes										-
31	Aeration lane - First zone	4	35.5	7.08		5.9	251	1006	5.9	No	No			Silsoe survey data	3225	30.34	30,521			30,521	
31	Aeration lane - Second zone	4	35.5	7.08		5.9	251	1006	5.9	No	No			Silsoe survey data	1584	14.91	14,995			14,995	
31	Aeration lane - Third zone	4	71.0	14.2		5.9	1006	4023	5.9	No	No			Silsoe survey data	390	3.5	14,082			14,082	
	Final effluent channels					0	782	782		No	No			Estimated emission	49	0.44	344			344	Assumed same odour emission rate as FST
	Final effluent UV channels					0	322.1	322		No	No			Estimated emission	49	0.44	142			142	
	Final Sedimentation tank distribution chamber	2	4.3	4.3		0	18	37		No	No			Silsoe survey data	1379	12.4	458			458	Estimated using 9x10 ⁻³ m/s air velocity above liquid surface which is the average value in the Silsoe odour survey
	Final Sedimentation tanks	8			42.6	0	1422	11376		No	No			Silsoe survey data	49	0.44	5,005			5,005	
	Final Sedimentation tank (converted PST)	1			55.5	0	2419	2419		No	No			Silsoe survey data	49	0.44	1,064			1,064	
Sludge treatment																					
43	Picket fence thickeners	3								Yes	Yes										-
38	SAS balancing tank	1	10.0	9.8		4.65	97.5	98	4.0	No	No			Silsoe survey data	283	2.54	248			248	
36	Digester feed tank	1	10.0	7.0		4.65	70	70	4.0	Yes	Yes										-
40	Digested sludge holding tank	1			21.99	4.92	379.8	380	4.9	No	No			Silsoe survey data	680	5.73	2,176			2,176	
	Unscreened Imported sludge tank	1								Yes	Yes										-
	Imported sludge tank (big)	1								Yes	Yes										-
	Primary sludge screenings skip	1	3.0	2.0		1.5	6	6		No	No			Estimated emission	11896	106.9	641			641	Assumed H2S concentration of 0.17ppm from previous Silsoe survey. Assumed air velocity of 9x10 ⁻³ m/s. Odour relationship obtained from 95%th percentile curve from "Sludge H2S correlation"
	Imported sludge screenings skips	2	3.0	2.0		1.5	6	12		No	No			Estimated emission	11896	106.9	1,283			1,283	Assumed H2S concentration of 0.17ppm from previous Silsoe survey. Assumed air velocity of 9x10 ⁻³ m/s. Odour relationship obtained from 95%th percentile curve from "Sludge H2S correlation"
44	Cake storage building	1	43.0	22.0		7.5	946	946	7095	0.0	Yes	Yes	12.5	Silsoe survey data	10837						-
	Cake storage building gate	1	5.0			5	25	25		0.0	No	No		Silsoe survey data	10837		135,463	100%		-	Assumed an exit velocity of 0.5m/s
41	SAS thickening belts	4								Yes	Yes										-
47	Waste gas burner	1								No	No										-
	Digested sludge centrifuge building									Yes	Yes										-
	Imported sludge drum thickeners									Yes	Yes										-
	Digester spill boxes	6								Yes	Yes										-
	Digester pressure relief valves	6								No	No										-
	Return liquor sump									Yes	Yes										-
Odour control units																					
54	OCU 1 - Import Sludge	1				10							2,491	Silsoe survey data	91,965			4,473	95.1%	3,095	Serving: 2 Holding tanks, import sludge screen imported sludge sump unscreened sludge tank, 3 PFT, splitter box and foul water/raw sump
18	OCU 2 - serving sludge thickening	1				10							4,792	Silsoe survey data	25,842			1,073	95.8%	1,428	Serving: 2 Dryer, wet cake silo, 3 centrifuges, dilution air inlet, digester feed tank, return liquor sump, 4x sludge thickener
	Main OCU - serving all covered channels and screening	1				10							36,749	Silsoe survey data	3,352			90	97.3%	919	Serving most channels before secondary treatment
	Digester OCU	1				10							522	Silsoe survey data	15,350			44	99.7%	6	Serving digester spill boxes only
Total																					
	Total emission rate to atmosphere																				152,234

D.2 Derivation of emission rates

D.2.1 Preliminary treatment

- Coarse screen skips (Five units) – An emission rate of $1.0 \text{ OU}_E/\text{m}^2.\text{s}$ was assumed (coarse screenings are washed and therefore assumed to be within the emission range of final effluent and storm sewage).
- Fine screen skips (Seven units) – The emission rate of sludge screening skips is assumed to apply ($106 \text{ OU}_E/\text{m}^2.\text{s}$). An H_2S concentration above the surface of 0.17 ppm was estimated and extrapolated to an odour concentration using the Seafield specific H_2S & odour relationship for sludge (see Appendix C for details). The derived odour concentration was then converted to an emission rate of $106 \text{ OU}_E/\text{m}^2.\text{s}$ using an air speed above the surface of 0.0089 m/s^3 . Further reduction of 40% was allowed for reduction of emissions owing to the skips being covered.
- Grit skips (Four units) – Odour emission rates have not been measured during the survey. The same emission rate of coarse screen skips was assumed ($1.0 \text{ OU}_E/\text{m}^2.\text{s}$).
- Detritors (Four units) – Three odour emission rates were derived from the survey data. Only the first two were used to calculate the baseline because the third measurement was taken when two detritors were offline.
- Storm channels and tanks – no odour emission rate has been included for storm water as they are assumed to be empty. There is however a background emission rate allowed for equal to the final effluent emission rate of $0.44 \text{ OU}_E/\text{m}^2.\text{s}$.

D.2.2 Primary treatment

- Primary sedimentation tanks (Four units were considered to be operational at any time) – Three odour emission rates were obtained from the survey. The average of the measured emission rates was used to estimate odour generated by the four primary sedimentation tanks. It is assumed that there are no emissions from the tanks out of service.

D.2.3 Secondary treatment

- Aeration lane (Four units were considered to be in operation at any time) – Eight odour emission rates have been measured across the aeration lane with summarized results in Table D.1. The aeration lanes are divided in three zones visualised in Figure 5.1. The last survey captured odour emission rates in all three zones and is used as a representative basis for the baseline scenario. Table D.2 details how the odour emission rates for each zone were obtained.
- Final effluent channels – An emission rate of $0.44 \text{ OU}_E/\text{m}^2.\text{s}$ was assumed. These will be more turbulent than FSTs; however, on the other hand the FSTs contain sludge which is not the case for effluent channels.
- Final sedimentation tank distribution chamber – odour concentration was obtained from the survey and was converted to a surface odour emission rate of $12.3 \text{ OU}_E/\text{m}^2.\text{s}$ using an air speed of 0.0089 m/s^1 .
- Final sedimentation tanks (Nine units) – Three odour emission rates were obtained from the survey. The average of the emission rates was used to estimate the odour emission rate of $0.44 \text{ OU}_E/\text{m}^2.\text{s}$

³ Average air speed used by Silsoe during their survey.

Table D.1: Measured odour emission rates $\text{OU}_E/\text{m}^2.\text{s}$

Survey date	First zone emission rate ($\text{OU}_E/\text{m}^2.\text{s}$)	Second zone emission rate ($\text{OU}_E/\text{m}^2.\text{s}$)	Third zone emission rate ($\text{OU}_E/\text{m}^2.\text{s}$)
06 June 2013	-	-	0.78
26 June 2013	-	35.61 ^(*)	0.77
23 July 2013	53.6	2.25	-
20 August 2013	14.5	63.5	3.5

Note: (*) single sample reading

Source: Silsoe Odours Ltd – Odour Emissions from the Seafield WWTW Summer 2013

Table D.2: Aeration lane emission rate calculation

Zone	Formula used to obtain emission rate	Baseline emission rate used ($\text{OU}_E/\text{m}^2.\text{s}$)
First zone	Geomean of emission rate measured at inlet and central walkway	30.3
Second zone	Geomean of emission rate measured at central walkway and the end of the first pass	14.9
Third zone	Equal to the emission rate measured at the end of the first pass	3.5

D.2.4 Sludge Treatment

- SAS balancing tank (One unit) – Three odour emission rates were derived from the survey data. The average was $2.54 \text{ OU}_E/\text{m}^2.\text{s}$ for the survey data.
- Digested sludge holding tank (One unit) – Three odour emission rates were derived from the survey data. The average of $5.73 \text{ OU}_E/\text{m}^2.\text{s}$ was for the inventory.
- Imported sludge and primary screenings skips (Three units) –. An estimated emission rate was used based on Mott MacDonald experience with sludge screenings skips. An H_2S concentration above the surface of 0.17ppm^4 was estimated and extrapolated to an odour concentration using the Seafield specific H_2S and odour relationship for sludge (Appendix C). The derived odour concentration was then converted to an emission rate of $106 \text{ OU}_E/\text{m}^2.\text{s}$ using the average air speed of 0.0089 m/s^3 .

D.2.5 Odour Control Units

- OCU 1 serving sludge imported region – Three odour concentrations at the stack were measured during the survey. The average of these three concentrations along with measured air flow rates was used to obtain the odour load of $3,095 \text{ OU}_E/\text{s}$.
- OCU 2 serving sludge thickening area – A single representative odour concentration was measured at the stack. The measured odour concentration along with measured flow rate was used to obtain the odour load of $1,428 \text{ OU}_E/\text{s}$.
- Main OCU serving most of the covered preliminary treatment units – Three odour concentrations were measured at the stack. The average of these three concentrations along with measured air flow rates was used to obtain the odour load of $919 \text{ OU}_E/\text{s}$.

⁴ Value measured by Silsoe on a different WwTW for a skip holding strain press screenings

- Digester OCU – Three odour concentrations at the stack were obtained from the survey. The average of these three concentrations along with measured air flow rates was used to obtain the odour load of 6 OUE/s.

Transport and Environment Committee

10am, Tuesday, 26 August 2014

Services for Communities Financial Monitoring: Period 2 2014/15

Item number	7.16
Report number	Routine
Executive/routine	
Wards	City-wide

Executive summary

Services for Communities (SfC) is forecasting the following outturn positions against its approved 2014/15 revenue and capital budgets:

- General fund revenue budget – managing significant pressures.
- Housing revenue account (HRA) – balanced.
- Capital budgets – balanced.

Services for Communities' general fund revenue budget presents significant challenges and risks in services such as Property Conservation and the new Shared Repairs Service, Winter Weather, Waste, internal improvement plan savings and Welfare Reform changes.

Links

Coalition pledges	P30
Council outcomes	CO25
Single Outcome Agreement	SOA1

Services for Communities Financial Monitoring Period 2 2014/15

Recommendations

- 1.1 It is recommended that the Transport and Environment Committee notes SfC's financial position and actions underway to manage pressures.

Background

- 2.1 At its meeting of 13 February 2014, the Council set its budget for the financial year 2014/15. The revenue budget for Services for Communities (general fund) was set at £115m and included savings of £13.4m. The general fund capital budget was set at £115.7m, including asset management works.
- 2.2 The budget meeting also approved a rent increase of 6% for Council homes. This provides a balance budget for the Housing Revenue Account and funds continued investment in affordable housing for the city.
- 2.3 This report monitors financial performance against these budgets.

Main report

General Fund Revenue Budget

- 3.1 At month two, SFC is managing pressures of £10.5m, which equates to 9% of its net budget of £115m. A range of measures has been put in place to manage these pressures, but the service's capacity to fund further pressures is limited.
- 3.2 SfC provides a diverse range of services and budget management presents significant complexity, challenges and risks.
- 3.3 Material risks and pressures this year include:
 - Property Conservation, Shared Repairs Service and development of an Enforcement Service.
 - Winter weather.
 - Achievement of imProve it and iPFM savings.
 - Achievement of property rationalisation, procurement and fleet savings.
 - Tram support operations.

- Landfill reduction.

Savings Implementation Plans

- 3.4 The SfC budget for 13/14 includes £13.4 m of savings to be delivered. Currently the department is on track to deliver £10.7m. The most significant shortfall relates to the iPFM internal improvement programme. This shortfall is being managed as a budget pressure.

Contingency Planning

- 3.5 In view of the pressures, risks and savings shortfalls noted above, SfC has introduced measures to reduce expenditure and achieve a balanced budget. These include reducing overtime by one third, reducing training budgets, non-filling of vacancies and savings from VERA.
- 3.6 These measures are sufficient to balance SfC's current pressures. However, given the scale and nature of the pressures faced, maintaining a balanced position will continue to be challenging.

Housing Revenue Account

- 3.7 The HRA is the Council's ring fenced account for the management of 20,000 Council homes. The gross expenditure budget in 2014/15 is £104m.
- 3.8 The HRA is forecasting a break even position. However welfare reform and changes in the funding of temporary accommodation continue to present very significant challenges.

Capital Budget

- 3.9 The general fund capital budget including asset management works was set at £115.7m in February 2014. The HRA capital budget was set at £48.2m in February 2014.
- 3.10 At month two, a balanced position is forecast for both general fund and HRA capital budgets.
- 3.11 A realignment and re-phasing exercise is currently under way, taking account of the final 2013-14 outturn and the most up to date cash flow projections. This realignment exercise will inform the revised capital investment programme 2014-2019 which will be reported to Finance and Resources Committee in August.

Measures of success

- 4.1 General fund revenue expenditure for 2013/14 is within budgeted levels.
- 4.2 A balanced position for the HRA.
- 4.3 Successful delivery of the SfC's capital investment programme within budget levels.

Financial impact

- 5.1 The financial implications arising from this report are being dealt with through budget monitoring and planning.

Risk, policy, compliance and governance impact

- 6.1 There are no direct risk, policy, compliance or governance implications arising from this report.

Equalities impact

- 7.1 The contents of this report, analysis and recommendations do not impact the Equality Act 2010 public sector general equality duty.

Sustainability impact

- 8.1 Successful delivery of SfC's budget will support continued improvement in environmental standards such as cleanliness and recycling.

Consultation and engagement

- 9.1 Consultation on budget proposals was undertaken as part of the Council's budget process.

Background reading/external references

John Bury

Acting director of Services for Communities

Rebecca Andrew, Principal Accountant

E-mail: rebecca.andrew@edinburgh.gov.uk | Tel: 0131 469 3211

Links

Coalition pledges	P30 – Continue to maintain a sound financial position including long term financial planning.
Council outcomes	CO25 – The Council has efficient and effective services that deliver on objectives
Single Outcome Agreement	SOA1 - Edinburgh's economy delivers increased investment, jobs, and opportunities for all

Transport and Environment Committee

10.00am, Tuesday, 26 August 2014

Objections to Proposed Waiting Restrictions, Traffic Regulation Order TRO/13/14

Item number	7.17
Report number	
Executive/routine	
Wards	5 - Inverleith 11 - City Centre

Executive summary

A Traffic Regulation Order was advertised in February 2014 to amend parking at various locations in the New Town and West End to allow for the introduction of communal bins to collect household waste. This report advises the Committee of the representations regarding the sites in several streets, received as part of the statutory consultation process, and makes recommendations to address the objections received.

Links

Coalition pledges	P44
Council outcomes	CO17, C018
Single Outcome Agreement	SO4

Objections to Proposed Waiting Restrictions, Traffic Regulation Order TRO/13/14

Recommendations

- 1.1 It is recommended that the Committee:
 - 1.1.1 sets aside the objections and makes the Traffic Regulation Order TRO/13/14 as advertised with respect to the parking restrictions in the following streets:
Bellevue Crescent, Coates Gardens, Rothesay Terrace; and
 - 1.1.2 agrees that Chester Street be withdrawn from the proposals.

Background

- 2.1 In February 2014, a Traffic Regulation Order (TRO) was advertised to implement waiting restrictions at various locations in the New Town and West End, for the purpose of introducing communal waste containers. These containers are for the use of residents as part of the Modernising Waste project, which aims to containerise household waste to avoid the problems associated with refuse sacks.
- 2.2 The bins are being introduced in line with the Council's guidelines on the siting of communal waste containers. A list of the streets covered by the TRO is provided in Appendix 1, together with plans of the parking amendments (Appendix 2).
- 2.3 The proposed change to the parking at these locations would allow the siting of 3200 litre side loading bins as used elsewhere in the city. Where no objections were received the sites are being progressed.
- 2.4 A small number of objections were received. A summary of these, together with responses, is provided in Appendix 3.
- 2.5 As outlined in Appendix 3, subsequent dialogue with the objectors resulted in one of these being withdrawn and one partly withdrawn. This report deals with only those which remain outstanding.

Main report

- 3.1 At the meeting of the Transport, Infrastructure and Environment Committee on 29 November 2011, it was agreed to phase out the use of black sack waste collections in the City Centre and replace these with on-street communal bins, or where these were not appropriate gull proof bags.
- 3.2 Due to the nature of the streets in the New Town and West End, it is often necessary to amend parking provision to allow the siting of bins.
- 3.3 The sites are selected taking into account the guidelines on the siting of bins, which were developed as part of the Modernising Waste project. These include:
 - Walking distance for the residents served by the bins.
 - The preference for bins to be located within parking bays where practicable, to reduce visual impact.
 - Minimising the impact on parking availability, eg by amending line markings to extend bays where a space is lost to a bin.
- 3.4 Assessments for bin sites take into account planning and transport issues and include a Road User Safety Audit, to ensure there are no safety concerns.
- 3.5 Following the advertisement of the TRO in February 2014, there were no objections to the majority of locations, where parking amendments were required to allow the siting of bins. In these cases the sites are being progressed and introduced as soon as the parking amendments are implemented.
- 3.6 Where objections were received Waste Services sought to engage the objector with regard to their concerns. This resulted in one of the objections concerning Bellevue Crescent being completely withdrawn, and part of that concerning Rothesay Terrace and Chester Street being partially withdrawn. The parts of the latter which were withdrawn related to the wider principle of the use of bins rather than the sites themselves.
- 3.7 A summary of the objections, the response to them, and the outcome is provided in Appendix 3.
- 3.8 Most of the objections are not concerned with changes to parking arrangements, but relate to wider issues, including the policy of using bins, the use of trade waste bins by businesses, and how consultation is carried out. While not strictly part of the TRO process these were responded to in the same way.
- 3.9 The proposal for Chester Street is being withdrawn to allow further consultation following representations from residents.

- 3.10 In Coates Gardens, Bellevue Crescent and Rothesay Terrace, the proposed sites are in line with the planning guidelines. Where possible any loss of parking is kept to a minimum either by extending bays or through siting bins outwith the parking bays where this option exists.

Measures of success

- 4.1 The introduction of the bins will reduce the amount of waste derived litter and improve street cleanliness.

Financial impact

- 5.1 It is anticipated the total cost associated with the TRO and installing double yellow lines at the locations described, will be approximately £300-£400 per site (this varies depending on the works required to move poles, line markings, etc).

Risk, policy, compliance and governance impact

- 6.1 The TRO will allow household waste to be collected from bins, in compliance with the policy previously agreed by Transport and Environment Committee.

Equalities impact

- 7.1 Consideration has been given to the relevance of the Equalities Act 2010 and there is no infringement of rights or impact on duties under this Act.

Sustainability impact

- 8.1 The recommendations within this report do not have any adverse impact on carbon impacts, adaptation to climate change or sustainable development.
- 8.2 The replacement of sacks with rigid containers for the collection of waste would be expected to reduce the spread of litter and therefore improve the local environment.

Consultation and engagement

- 9.1 This Order was advertised for public consultation from 6 December 2013 to 10 January 2014 in line with TRO procedures. Several objections were received as part of the public consultation, one of which was subsequently withdrawn in full while one was withdrawn in part.

- 9.2 As part of the proposed introduction of on-street bins to the World Heritage Site, extensive consultation with all interested parties, including local members, took place between October 2010 and January 2011 and the results were presented to the Transport, Infrastructure and Environment Committee on 29 November 2011. The recommendation of the report was that the black bag method of waste collection be phased out and be replaced with either on-street bins or gull proof sacks.
- 9.3 The City Centre and Inverleith Ward Councillors have been consulted on these proposals, and no comments have been received.

Background reading/external references

Modernising Waste Collection in the World Heritage Area – Report to Transport, Infrastructure and Environment Committee, 29 November 2011

John Bury

Acting Director of Services for Communities

Contact: Angus Murdoch, Waste Strategy Officer, Waste and Fleet Services

E-mail: angus.murdoch@edinburgh.gov.uk | Tel: 0131 469 5427

Links

Coalition pledges

Council outcomes CO21: Safe – Resident, visitors and businesses feel the Edinburgh is a safe City.

Single Outcome Agreement SO4: Edinburgh’s communities are safer and have improved physical and social fabric.

Appendices Appendix 1 - List of sites covered by TRO 13/14
Appendix 2 - Location Plan of all sites covered by TRO 13/14
Appendix 3 - Summary of Objections to TRO 13/14

Appendix 1: List of Streets Covered by TRO 13/14

Albany Street

Bellevue Crescent

Chester Street

Clarendon Crescent

Coates Gardens

Dublin Street, Dublin Street Lane North

Dundonald Street, Royal Crescent

Rothesay Terrace & Place

Royal Circus south side only

Scotland Street

St Vincent Street

Walker Street

William Street & William Street NE Lane

SERVICES FOR COMMUNITIES

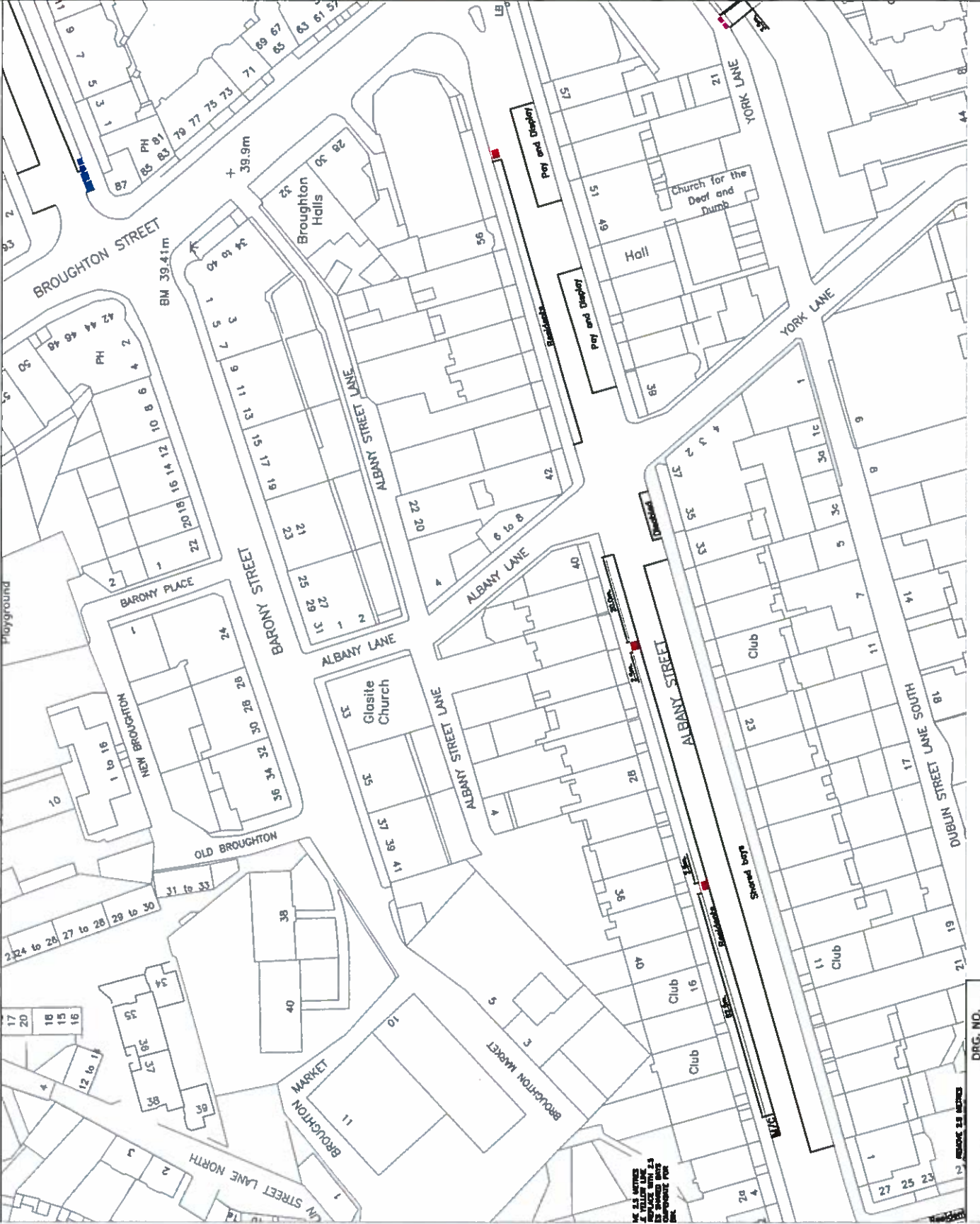
DRG. NO. 17
20
18
15
16

DRG. NO. 17
20
18
15
16

**PROPOSED
3200 LITRE
CONTAINER**



**EXISTING
CONTAINER**



2	COMMENTS FROM J. RICHMOND	IC 25/9	GP
1	COMMENTS FROM EWT, PLANNING, AND WASTE SERV.	IC 15/6	MP

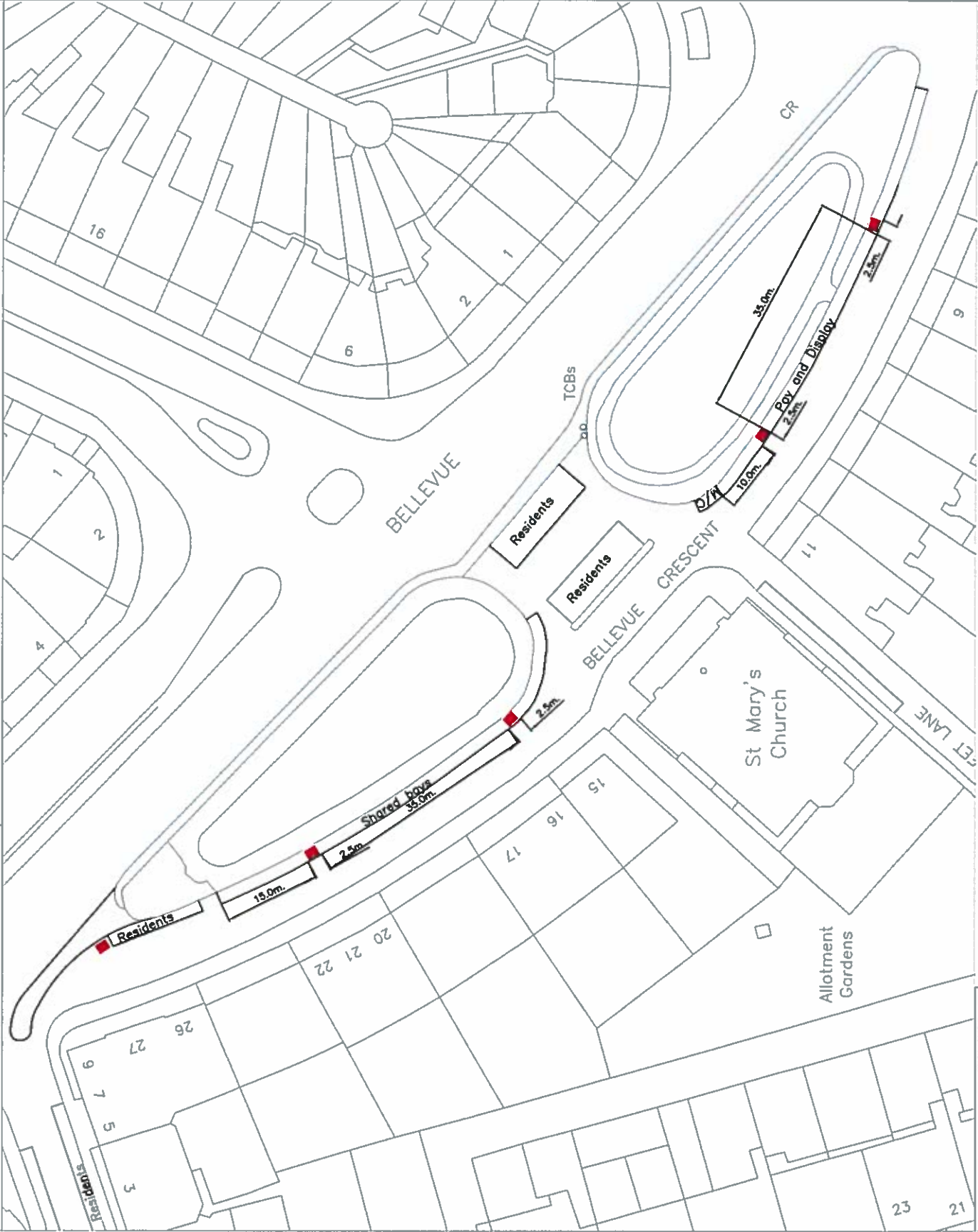
EDINBURGH
THE CITY OF EDINBURGH COUNCIL
City Centre Neighbourhood Team
SERVICES FOR COMMUNITIES
The City of Edinburgh Council
1 Colinton Street
Edinburgh, Edinburgh, Midlothian, Scotland
Tel. No. 0131-222 2000

ALBANY STREET

DRG. NO. 17
20
18
15
16

NOTES:

**PROPOSED
3200 LITRE
CONTAINER**



2	COMMENTS FROM J. RICHMOND	IC:30/9 JR
1	COMMENTS FROM EWT, PLANNING, AND WASTE SERV.	IC:15/6 MP

EDINBURGH
 THE CITY OF EDINBURGH COUNCIL
 SERVICES FOR COMMUNITIES
 The City of Edinburgh Council
 1 Cadden Street
 Edinburgh EH1 1LJ
 Tel. No. 0131 220 2000

BELLEVUE CRESCENT

Author: [blank] Date: [blank]
 Checked: [blank] Date: [blank]

SERVICES FOR COMMUNITIES

DRG. NO.

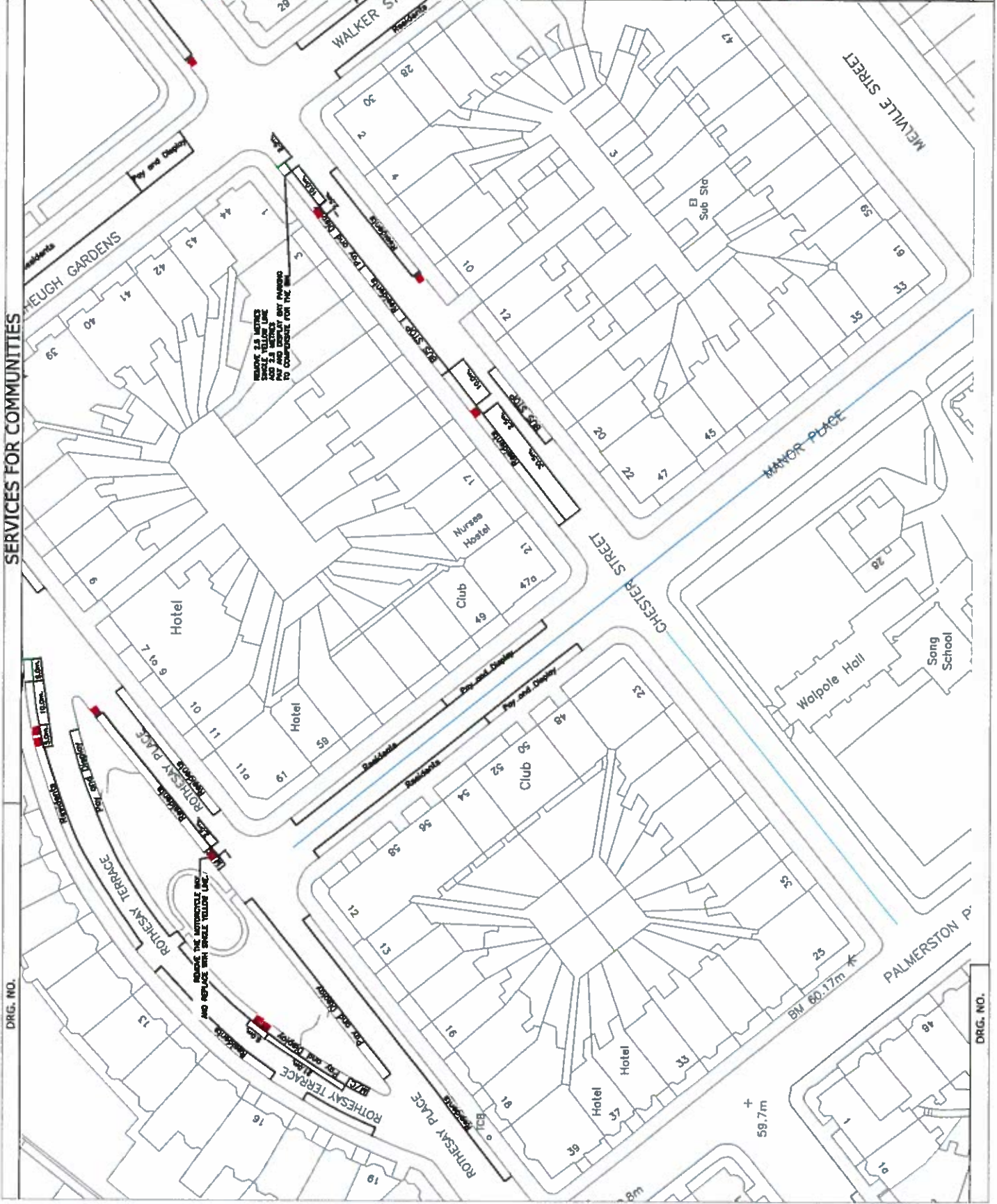
DRG. NO.

NOTES:

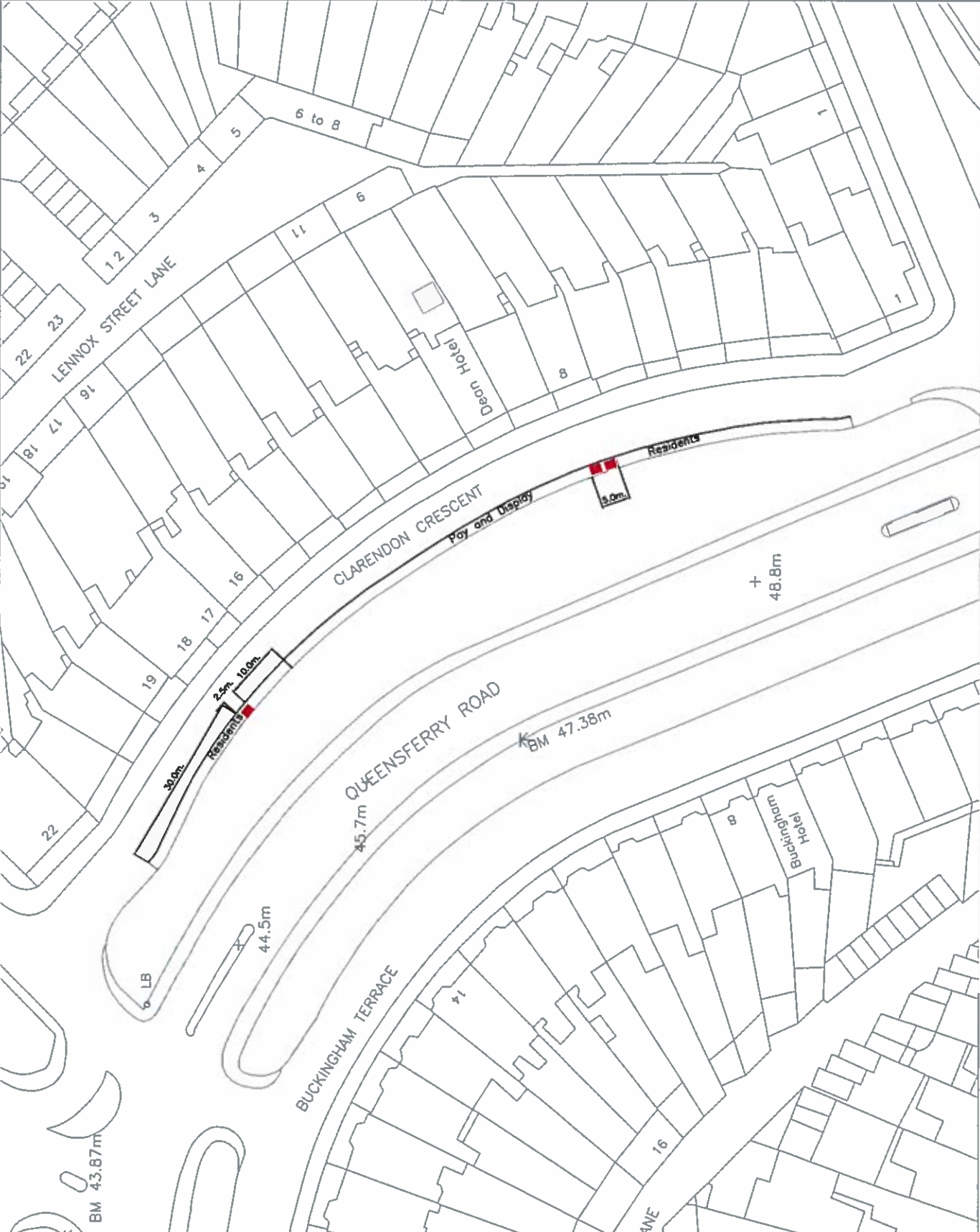
- █ PROPOSED 3200 LITRE CONTAINER
- █ PROPOSED PARKING BAYS
- █ EXISTING GULL PROOF BAGS
- █ PROPOSED GULL PROOF BAGS

REMOVE 2.1 METRES
SHADE YELLOW LINE
ADD 2.1 METRES
TO COMPLETE FOR THE

REMOVE THE AUTOMOBILE NO.
AND REPLACE WITH SHADE YELLOW LINE.



2	COMMENTS FROM J. RICHMOND	IC 30/9	JR
1	COMMENTS FROM EWT, PLANNING, AND WASTE SERV.	IC 15/6	MP
<p>THE CITY OF EDINBURGH COUNCIL City Centre Neighbourhood Team The City of Edinburgh Council 1 Canaburg Street Edinburgh EH1 1ZL T.E. No. 0131-200 1000</p>		DRG. NO.	DRG. NO.
<p>CHESTER STREET</p>		DRG. NO.	DRG. NO.



NOTES:
 PROPOSED 3200 LITRE CONTAINER

REV	DATE	BY	CHKD
2			
1			

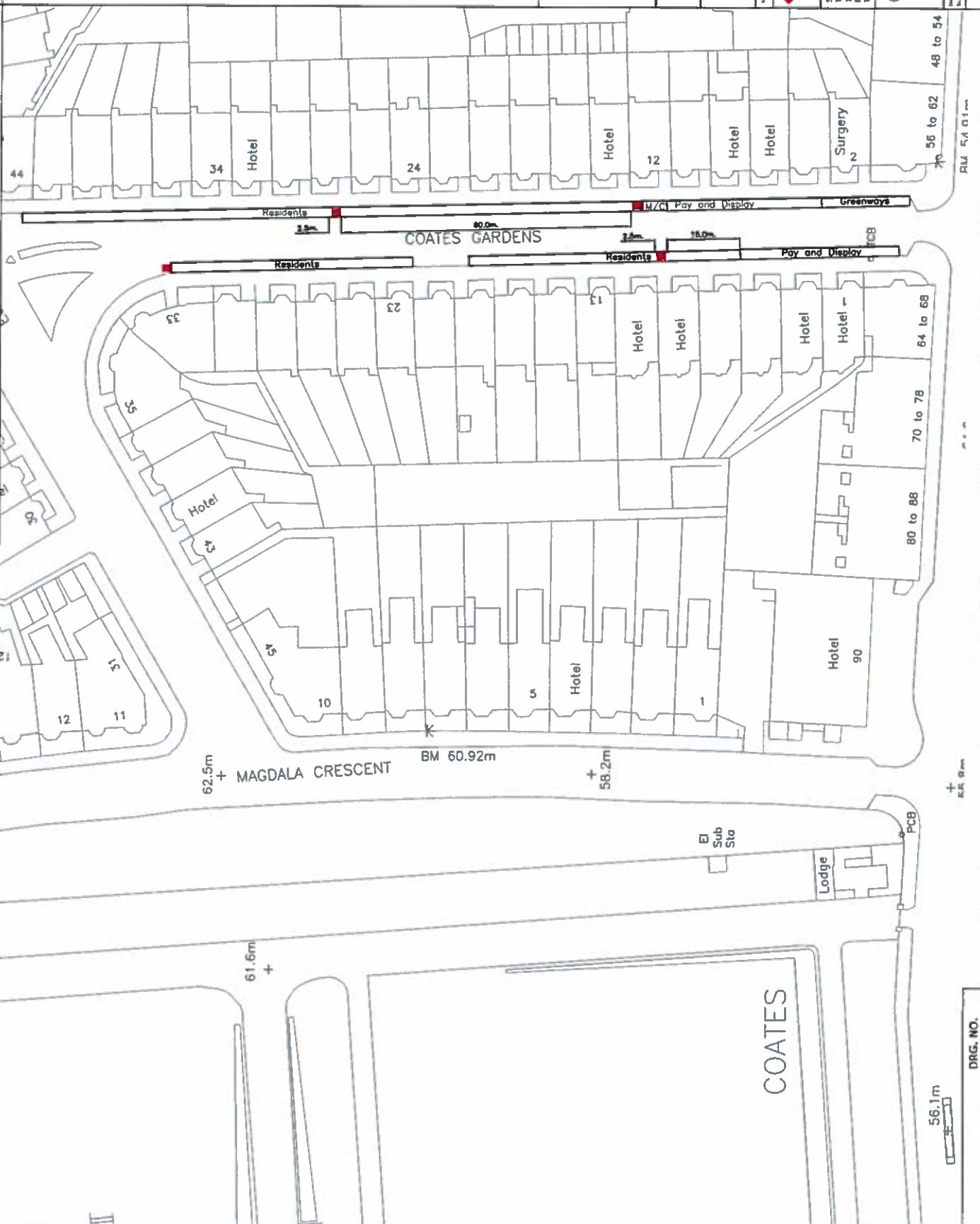
COMMENTS FROM J. RICHMOND IC 3018 JR

COMMENTS FROM EWT, PLANNING, AND WASTE SERV. IC 1516 MP

EDINBURGH
 THE CITY OF EDINBURGH COUNCIL
 City Centre Neighbourhood Team
 Services for Communities
 The City of Edinburgh Council
 1 Colinton Street
 Edinburgh EH11 1LZ
 Tel. No. 011 300 2000

CLARENDON CRESCENT

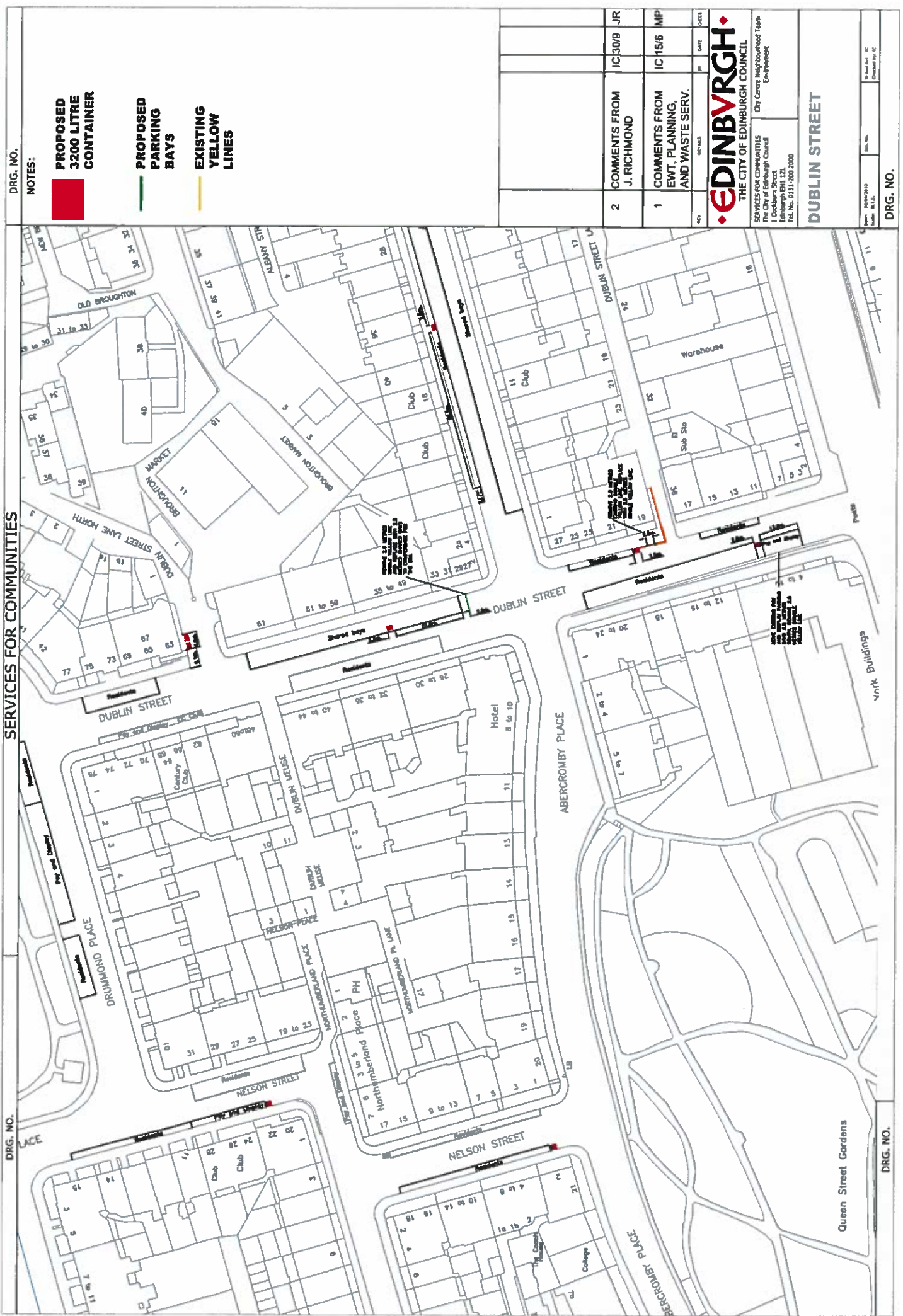
DRG. NO.



NOTES:
 PROPOSED 3200 LITRE CONTAINER
 PROPOSED PARKING BAYS

IC 30/9	JR
IC 15/6	MP
IC 30/9	JR
IC 15/6	MP
EDINBURGH THE CITY OF EDINBURGH COUNCIL SERVICES FOR COMMUNITIES The City of Edinburgh Council 1 Colinton Street Edinburgh EH1 1LZ Tel. No. 0131-200 1000 City Centre Neighbourhood Team Environment	
COATES GARDENS	





DRG. NO.

NOTES:

PROPOSED 3200 LITRE CONTAINER



PROPOSED PARKING BAYS



EXISTING YELLOW LINES



SERVICES FOR COMMUNITIES

DRG. NO.

DRG. NO.

2	COMMENTS FROM J. RICHMOND	IC 30/9 JR		
1	COMMENTS FROM EMT, PLANNING, AND WASTE SERV.	IC 15/6 MP		
47			in	DATE

EDINBURGH
 THE CITY OF EDINBURGH COUNCIL
 SERVICES FOR COMMUNITIES
 City Centre Neighbourhood Team
 The City of Edinburgh Council
 1 Colinton Street
 Edinburgh, Scotland
 Tel. No. 0131-700 2000

DUBLIN STREET

Queen Street Gardens

York Buildings

Warehouse

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

Club

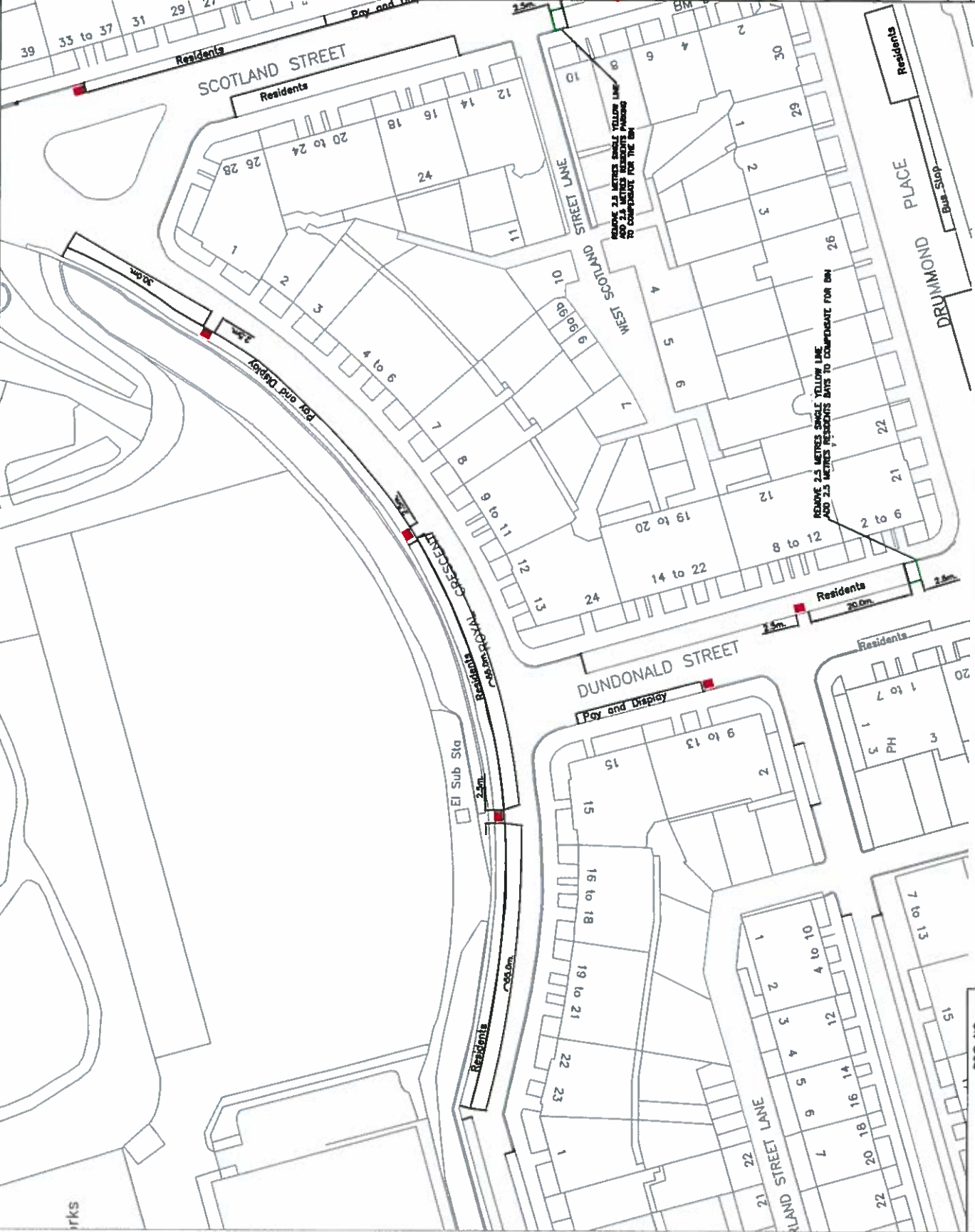
Club

Club

Club

Club

- NOTES:
- PROPOSED 3200 LITRE CONTAINER
 - PROPOSED PARKING BAYS



2	COMMENTS FROM J. RICHMOND	IC30/8	JR	
1	COMMENTS FROM EWT, PLANNING, AND WASTE SERV.	IC15/6	MP	
BY	APPROVALS	BY	DATE	

EDINBURGH
 THE CITY OF EDINBURGH COUNCIL
 SERVICES FOR COMMUNITIES
 The City of Edinburgh Council
 1 Colinton Street
 Edinburgh EH10 5DT
 Tel: 0131 551 2000

City Centre Neighbourhood Team
 Environment

DUNDONALD STREET & ROYAL CRESCENT

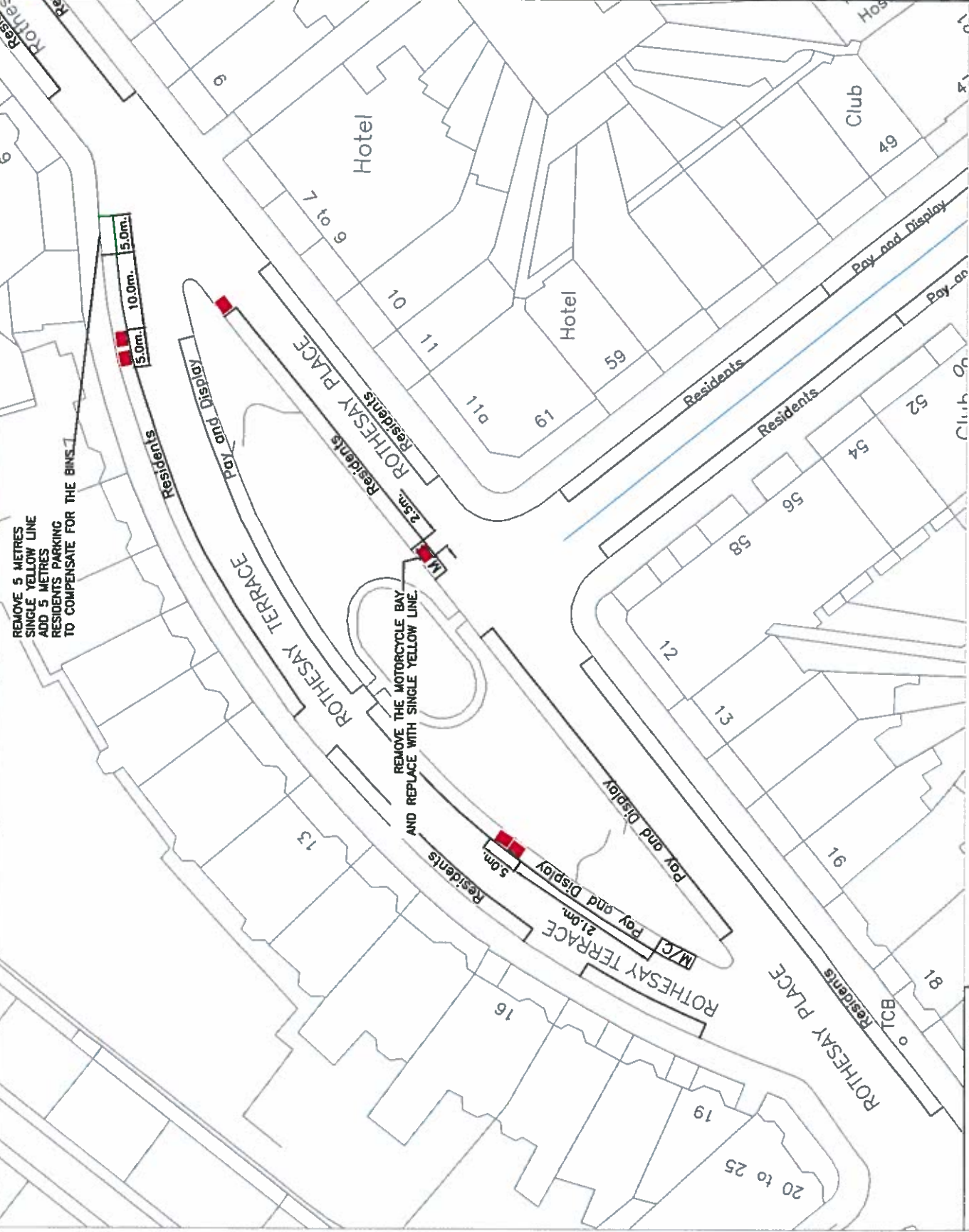
Drawn By: IC
 Checked By: IC
 Date: 11/12/2008

SERVICES FOR COMMUNITIES

DRG. NO.

DRG. NO.

REMOVE 5 METRES
SINGLE YELLOW LINE
ADD 5 METRES
RESIDENTS PARKING
TO COMPENSATE FOR THE BINS.



- NOTES:
- PROPOSED 3200 LITRE CONTAINER
 - EXISTING GULL PROOF BAGS
 - PROPOSED LINE MARKING

2	COMMENTS FROM J. RICHMOND	IC 30/9	JR
1	COMMENTS FROM EWT, PLANNING, AND WASTE SERV.	IC 15/6	MP

EDINBURGH
THE CITY OF EDINBURGH COUNCIL
City Centre Neighbourhood Team
Services for Communities
The City of Edinburgh Council
1 Colinton Street
Edinburgh EH1 1ZL
Tel. No. 0131-260 2000

ROTHESAY TERRACE

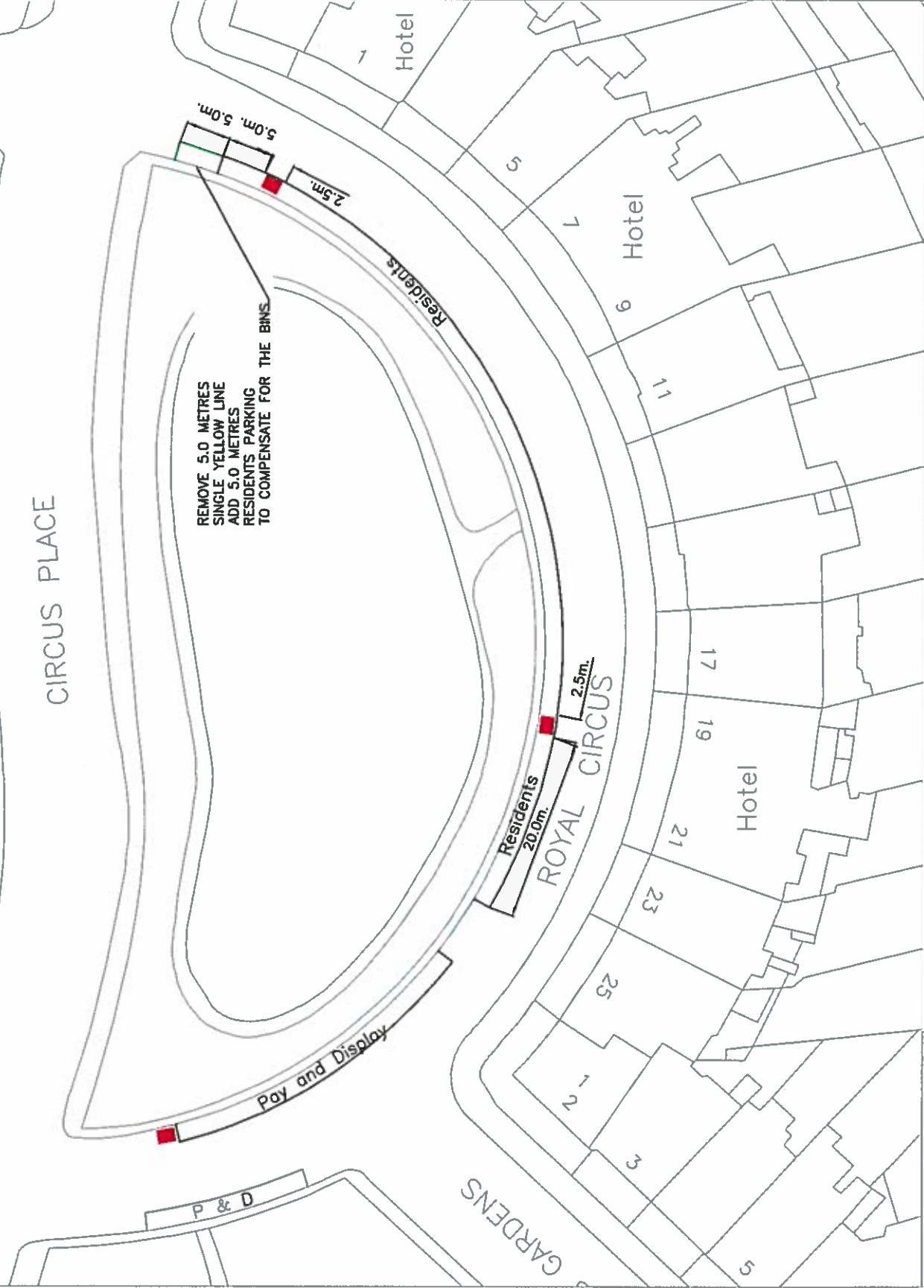
DRG. NO.

**PROPOSED
3200 LITRE
CONTAINER**

**PROPOSED
PARKING
BAYS**

CIRCUS PLACE

REMOVE 5.0 METRES
SINGLE YELLOW LINE
ADD 5.0 METRES
RESIDENTS PARKING
TO COMPENSATE FOR THE BINS.

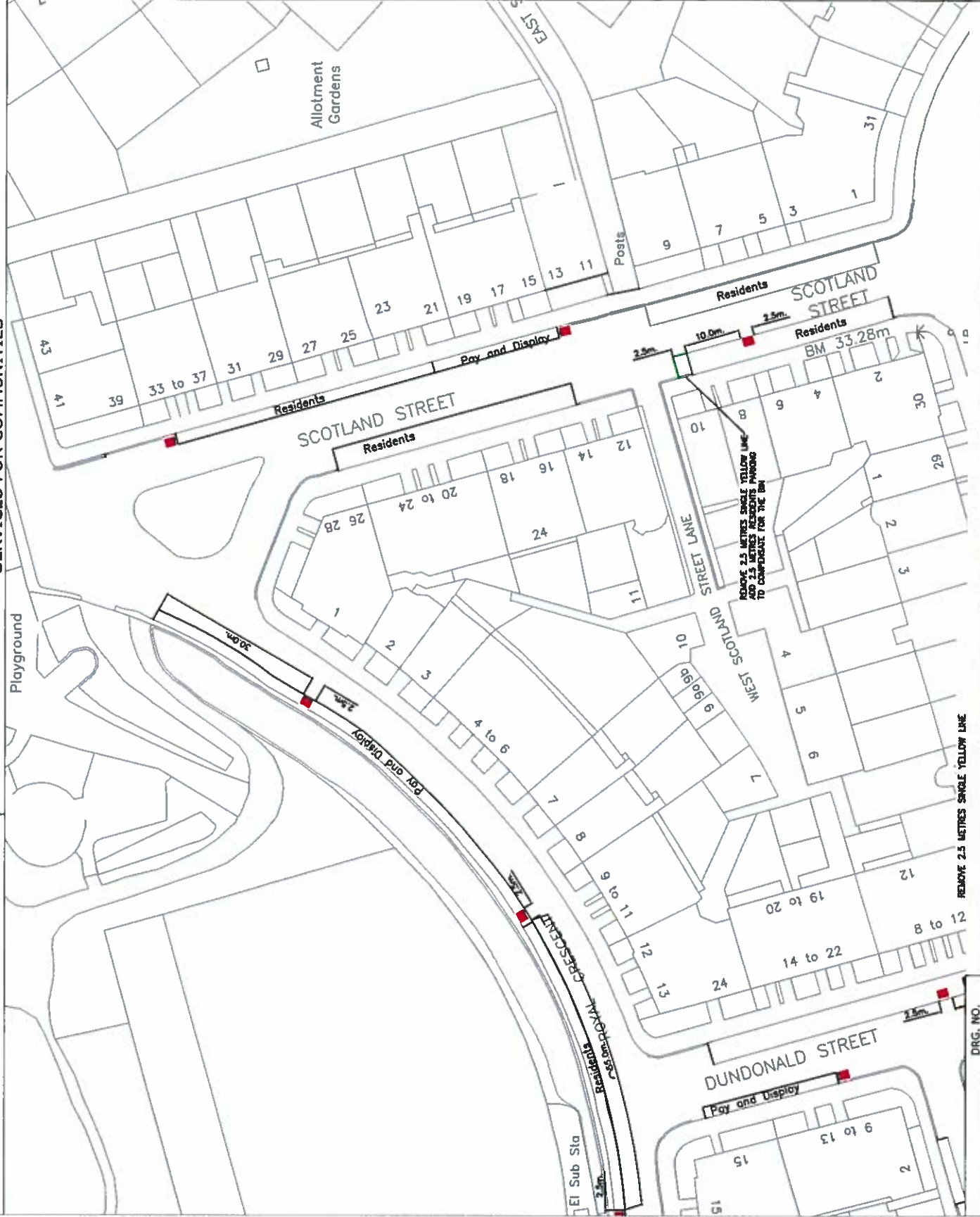


2	COMMENTS FROM J. RICHMOND	IC 30/9 JR
1	COMMENTS FROM EWT, PLANNING, AND WASTE SERV.	IC 15/6 MP

EDINBURGH
THE CITY OF EDINBURGH COUNCIL
City Centre Neighbourhood Team
The City of Edinburgh Council
1 Dickson Street
Edinburgh EH1 1ZL
Tel. No. 0131-200 2000

ROYAL CIRCUS SOUTH

- NOTES:
- PROPOSED 3200 LITRE CONTAINER
 - PROPOSED PARKING BAYS



REF	DETAILS	DATE	BY	CHECKED
2	COMMENTS FROM J. RICHMOND	IC 30/9	JR	
1	COMMENTS FROM EWT, PLANNING, AND WASTE SERV.	IC 15/6	MP	

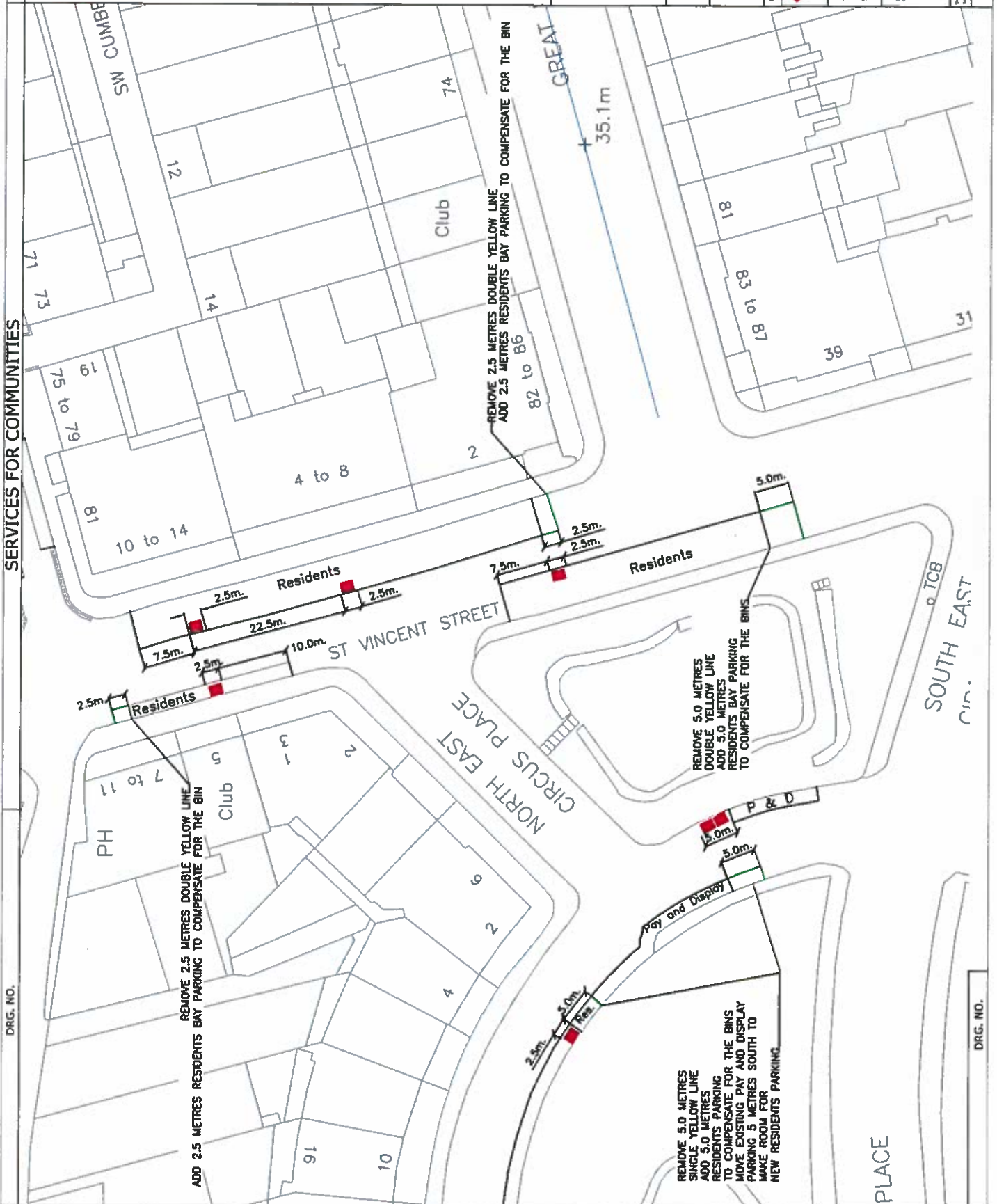
EDINBURGH
 THE CITY OF EDINBURGH COUNCIL
 SERVICES FOR COMMUNITIES
 The City of Edinburgh Council
 1 Canaburn Street
 Edinburgh EH1 1ZL
 Tel. No. 011 200 2000

City Centre Neighbourhood Team
 Environment
 DRG. NO. SCOTLAND STREET

Date: 20/04/2012
 Author: A.L.Z.
 Scale: No.
 Project Ref: 10
 Drawing Ref: 10

NOTES:

- PROPOSED 3200 LITRE CONTAINER
- EXISTING GULL PROOF BAGS
- PROPOSED PARKING BAYS



2	COMMENTS FROM J. RICHMOND	IC 25/9	GP
1	COMMENTS FROM EMT, PLANNING, AND WASTE SERV.	IC 15/6	MP
BY	DATE	BY	DATE

EDINBURGH
THE CITY OF EDINBURGH COUNCIL

SERVICES FOR COMMUNITIES
City Centre Neighbourhood Team
The City of Edinburgh Council
1 Colinton Street
Edinburgh EH10 5DT
Tel. No. 0131-200 2000

ST VINCENT STREET

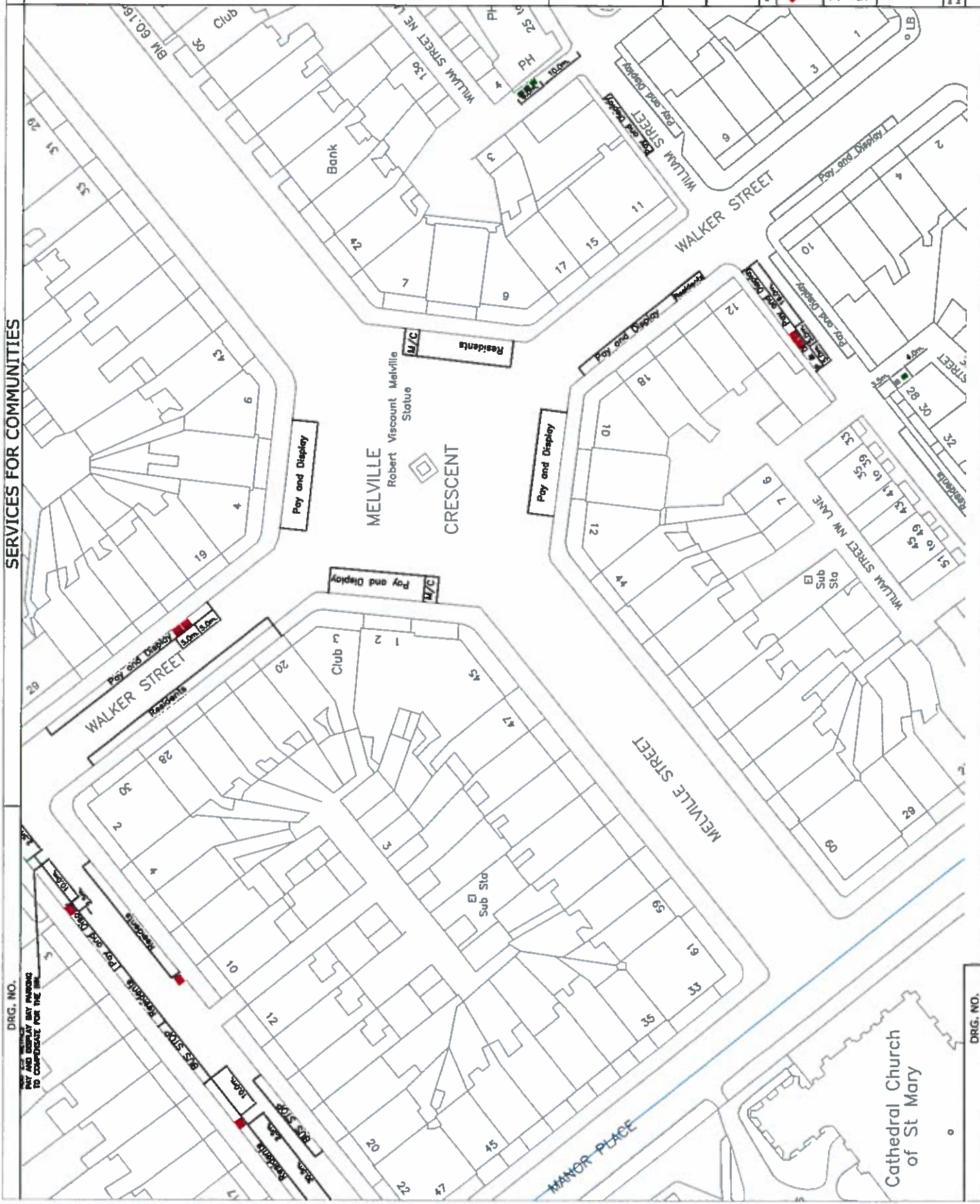
DRG. NO.

SERVICES FOR COMMUNITIES

DRG. NO. 1000
 THIS PLAN AND DISPLAY MAY BE REVISED WITHOUT NOTICE TO ACCOMMODATE FOR THE CITY.

DRG. NO. 1000

- NOTES:
- PROPOSED 3200 LITRE CONTAINER
 - PROPOSED 1280 LITRE CONTAINER



REV	DATE	BY	CHKD
2		IC309	JR
1		IC15/6	MP

COMMENTS FROM J. RICHMOND

COMMENTS FROM EWT, PLANNING, AND WASTE SERV.

EDINBURGH
 THE CITY OF EDINBURGH COUNCIL
 SERVICES FOR COMMUNITIES
 City Centre Neighbourhood Team
 The City of Edinburgh Council
 1 Cockburn Street
 Edinburgh EH1 1SS
 Tel. No. 0131-552 2000

WALKER STREET

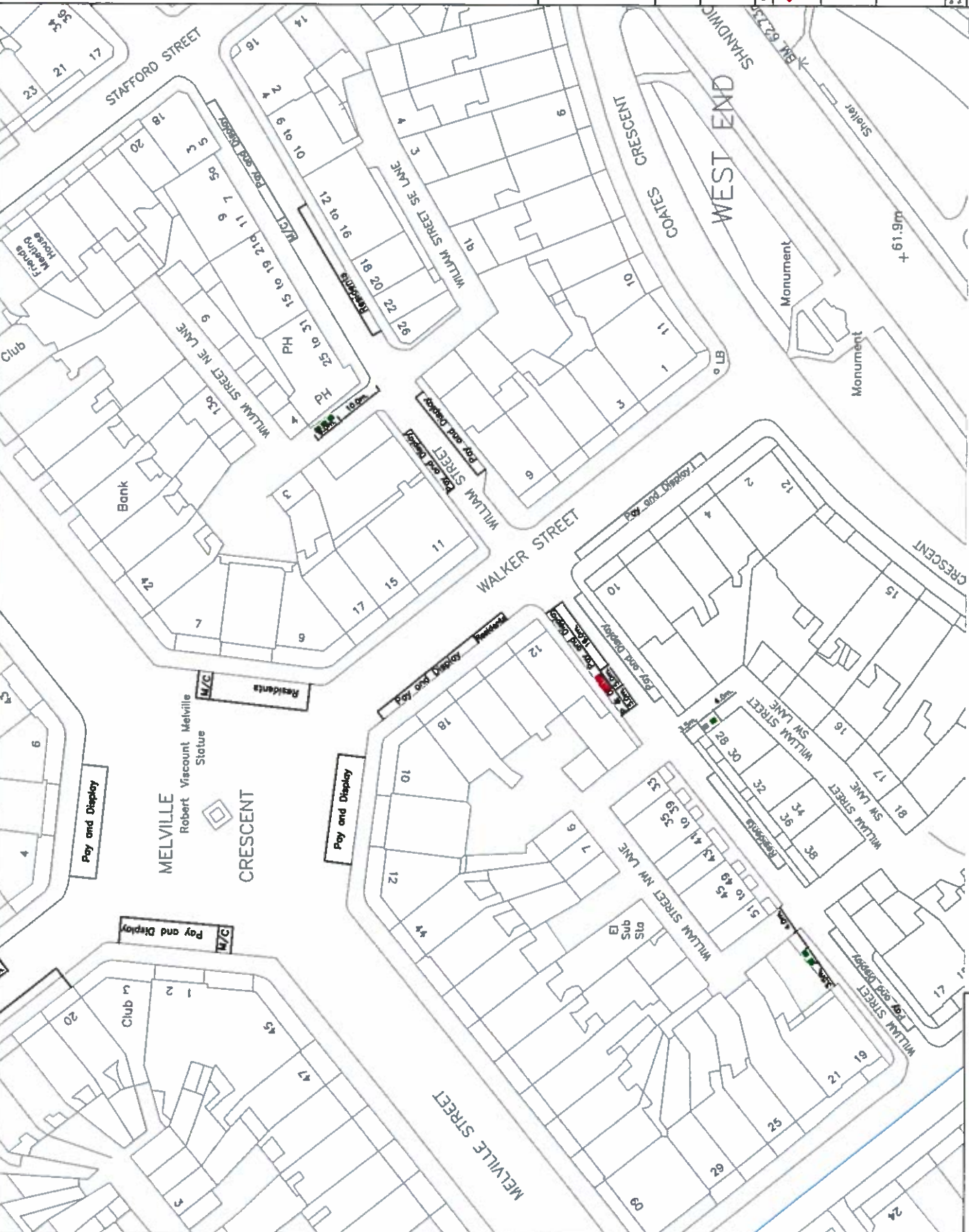
DRG. NO. 1000

Issue: 10/04/2011
 Date: 01/11/2010
 Drawn By: JC
 Checked By: E

SERVICES FOR COMMUNITIES

DRG. NO.

DRG. NO.



- NOTES:
- PROPOSED 3200 LITRE CONTAINER
 - PROPOSED 1280 LITRE CONTAINER

IC 3019	JR
IC 1516	MP
EDINBURGH THE CITY OF EDINBURGH COUNCIL City Centre Neighbourhood Team The City of Edinburgh Council 1 Canaburg Street Edinburgh EH1 1ZL Tel. No. 0131-220 2000	
WILLIAM STREET	
IC 3019	JR
IC 1516	MP
COMMENTS FROM J. RICHMOND	
COMMENTS FROM EWT, PLANNING, AND WASTE SERV.	

DRG. NO.

DRG. NO.

Appendix 3: Objections to TRO 13/14

Street (s)	Objections and Response to These	Outcome
<p>Coates Gardens</p>	<p>Two objections received which contained a number of concerns:</p> <ul style="list-style-type: none"> • Lack of consultation: <p>Advised regarding consultation process.</p> <ul style="list-style-type: none"> • Reduction in parking places, particularly given competition with hotel clients. <p>Advised that every effort is made to avoid minimise parking losses. In this case use of sites on single yellow lines has kept losses to two spaces.</p> <p>It was not possible to extend the parking bays to offset these two spaces, as these already extend to the junctions.</p> <p>Noted that retention of a twice weekly service also reduces losses.</p> <ul style="list-style-type: none"> • Noise associated with bins being emptied, particularly at night. <p>Explained emptying process and advised there should be no real difference with current collections.</p> <p>Noted that while services are double shifted, collections generally finish by 9 PM.</p> <ul style="list-style-type: none"> • Existing collections (photo provided of unsightly group of commercial bins occupying build out on corner with Haymarket Terrace; private bins overflowing. Also concern that businesses will use bins. <p>Advised that City Centre and Leith team are piloting action on this subject.</p> <p>As the bins are overflowing and the waste not contained in the photo, advised that</p>	<p>Objections Remain in Full</p>

	<p>this can be reported to Environmental Wardens who also investigate use of household bins by businesses.</p> <p>Noted that apparent household waste around the bins tends to support the provision of containers.</p> <ul style="list-style-type: none"> • Suggestion that some streets have gardens and that the bins can be sited there. <p>Advised that bins are being rolled out in phases and that where possible bins are sited on the “garden side” as proposed to minimise intrusion.</p> <p>Suggestions that current service works well, or that action should be taken regarding people who present waste inappropriately.</p> <p>Advised that the current service is subject to complaint. Explained that action is taken and people are fined but that problems also arise even when waste is properly presented due to gull activity.</p>	
<p>General Objection to use of bins in World Heritage Site, with specific concerns relating to Rothesay Terrace eastern end and Chester Street</p>	<p>One Objection</p> <ul style="list-style-type: none"> • Policy Objection <p>Explained about lengthy consultation in 2011, and the outcome that bins are compatible where sited appropriately and can serve to enhance the environment. Provided copy of report as background.</p> <ul style="list-style-type: none"> • There was no email address to respond to consultation <p>Explained the procedure that people are directed to view maps first, then advised of how to provide feedback. We would not expect people to object without first viewing the proposals.</p>	<p>Objection regarding use of bins in principle and relating to consultation procedures withdrawn.</p> <p>Objection to bin at east end of Rothesay Terrace stands.</p>

	<ul style="list-style-type: none"> • Concern about impact on parking and use of resident spaces over pay and display, and siting of bin outside a hotel at Rothesay Terrace. Bin should be sited at hedge across the street to reduce visual impact and use pay and display parking. <p>Explained re siting guidelines. Bin is at a blank wall. Parking is being extended so no net loss of parking. The proposed site avoids householders standing on roadway to use bins.</p> <p>Also referred to sites in Rothesay Place in later correspondence, however there were no actual objections to these but the intention is to make the TRO for these at the same time as for Rothesay Terrace.</p> <ul style="list-style-type: none"> • In Chester Street the bins should be moved to pay and display. Complaint also that some households have gull proof bags which are unsightly. 	<p>Objection to Chester Street bins was not withdrawn. Waste Services are carrying out further consultation on use of gull proof bags at this location.</p>
<p>Bellevue Crescent</p>	<p>Two objections</p> <ul style="list-style-type: none"> • Concern that bins are sited on the Crescent at intervals. One suggestion that bins be sited in the Square or Scotland Street Lane. Visual impact, particularly in relation to new lighting and pavements. <p>Bins are sited at intervals along the Crescent within the line of cars and are smaller than some cars. This serves to minimise visual intrusion. This is in line with the guidelines we follow. Bins are normally sited in the street they serve, while siting bins in the Square would require some residents to walk some way. In addition the lorry needs to pull up alongside the bin to access. This would be problematic in the Square and a number of spaces would be lost there.</p> <ul style="list-style-type: none"> • If bins go ahead can they be green instead of black? Can gull proof bags be considered? <p>During the consultation we did not receive requests in favour of gull proof bags. However the bins will be green.</p>	<p>1 objection withdrawn but the other remains, with regard to visual intrusion and siting in the Square and Scotland Street Lane.</p>

Transport and Environment Committee

10.00am, Tuesday 26 August 2014

Corporate Performance Framework: Performance from November 2013 to April 2014

Item number	8.1
Report number	
Executive/routine	
Wards	All

Executive summary

This report provides an update on performance against the Transport and Environment strategic outcomes. The report is presented in line with an update on the Council's Performance Framework approved by Corporate Policy and Strategy Committee in December 2013 and contains analysis of performance covering the period from November 2013 to April 2014.

Links

Coalition pledges

Council outcomes

Single Outcome Agreement [SO4](#)

Corporate Performance Framework: Performance from November 2013 – April 2014

Recommendations

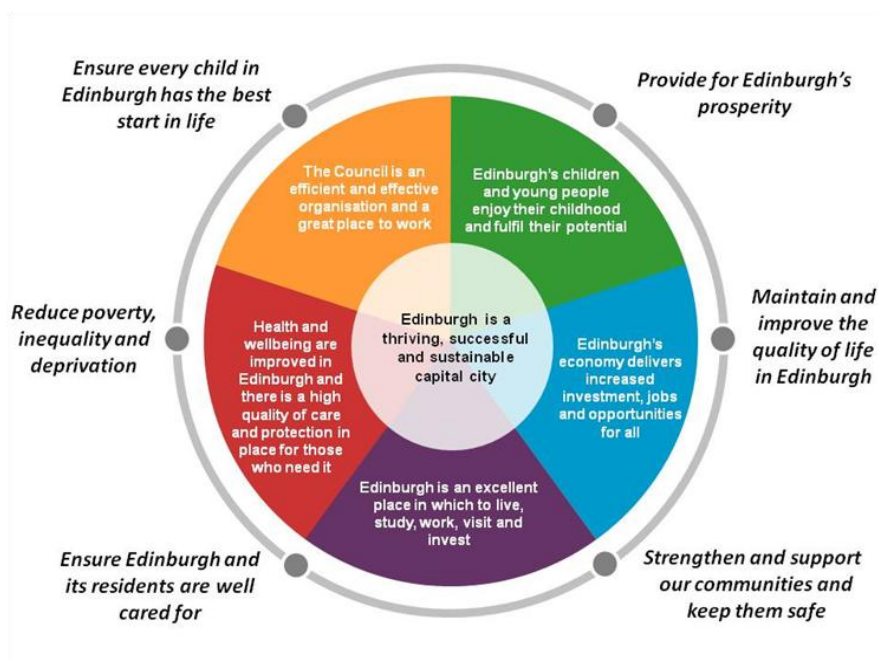
- 1.1 It is recommended that the Transport and Environment Committee notes the performance for the period from November 2013 to April 2014 and agrees the actions for improvement.

Background

- 2.1 The [‘Review of political arrangements’](#) report to the City of Edinburgh Council on 24 October 2013 approved a number of revisions to committee business. It was agreed by Council that performance monitoring, review and scrutiny will be led by the Executive Committees on a bi-annual basis with oversight by the Corporate Policy and Strategy Committee.
- 2.2 This report provides an update on Council performance against the Transport and Environment strategic outcomes for the period from November 2013 to April 2014.

Main report

- 3.1 The Council’s Performance Framework is set out in the diagram below and takes account of the Council’s vision, five strategic outcomes and the six key Capital Coalition pledges.



- 3.2 This report provides a performance update for the Council outcome Edinburgh is an excellent place to live, study, work, visit and invest.
- 3.3 The Corporate Dashboard in [Appendix 1](#) provides an overview of performance in meeting this Council outcome from November 2013 to April 2014. Further detailed information by indicator is provided in [Appendix 2](#).

Measures of success

- 4.1 This report provides detail on Council performance against delivery of transport and environment outcomes for the period from November 2013 to April 2014.

Financial impact

- 5.1 The financial impact is set out within the Council's Performance Framework.

Risk, policy, compliance and governance impact

- 6.1 Risk, policy, compliance and governance impact is integrated within the Council's Performance Framework.

Equalities impact

- 7.1 Reducing poverty, inequality and deprivation is integrated within the Council's Performance Framework.

Sustainability impact

- 8.1 The sustainability impact is set out within the Council's Performance Framework.

Consultation and engagement

- 9.1 Priorities and outcomes have been developed in consultation with stakeholders.

Background reading / external references

The [Council's Performance Framework](#) approved by Corporate Policy and Strategy Committee on 3 December 2013.

John Bury

Acting Director of Services for Communities

Contact: Jo McStay, Business Intelligence Manager

E-mail: jo.mcstay@edinburgh.gov.uk | Tel: 0131 529 7950

Links

Coalition pledges

Council outcomes

Single Outcome Agreement SO4 Edinburgh's communities are safer and have improved physical and social fabric

Appendices

[Appendix 1: Corporate Dashboard](#)

[Appendix 2: Corporate Dashboard Indicator Detail](#)

Appendix 1: Dashboard November 2013 – April 2014








Edinburgh is an excellent place in which to live, study, work, visit and invest

Director's notes:

Recycling and Landfill: Further improving recycling performance is almost entirely dependent on changing public behaviours and a number of activities are on-going to engage with local residents, promote awareness and influence attitudes. These include door knocking, radio and bus advertisements and attendance at local events. The diversion of CRC waste, street litter and sweepings via new contracts is improving performance, with additional recycling tonnage being recorded which was previously going to landfill.

Street Cleaning: Street cleanliness continues a positive trend in performance, and this year (2013/14) we achieved our city wide CIMS annual target of 72 with 95% of streets assessed as meeting the national standard for cleanliness.





Transport: A new Local Transport Strategy 2014 – 2019 has been approved which sets out detailed priority action plans to deliver services. This strategy builds on a continued, long - term emphasis on active and sustainable travel.



	Feb-14	Mar-14	Apr-14	Target
<u>Recycling</u>	38.4%	40.1%	43.9% 	48.9%
Recycling – Statutory Performance Indicator national average	42.5% Ranked 21 out of 32			-
<u>Amount of Waste landfilled (monthly)</u>	8,967	10,494	10,668 	10,211
<u>% of lighting repairs completed within 7 days</u>	96.2%	99%	96.4% 	92%
<u>% of priority road defects repaired within 3 working days</u>	85.4%	70.2%	73.5% 	92%
	Oct-Dec 13	Jan-Mar 14	Target	
<u>Cleanliness of streets (CIMS)</u>	71	74 	72	
Cleanliness of streets (LEAMS) - Keep Scotland Beautiful average	72 Ranked 20 out of 32			
<u>% of streets clean</u>	95%	96% 	95%	
	2011	2012	Target	
<u>Road condition index</u>	32.5%	34.0% 	n/a	


Appendix 2: Corporate Dashboard Indicator Detail





November 2013 – April 2014

3. Edinburgh is an excellent place to live, study, work, visit and invest

Indicator	Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	Target	Status	Latest Note
% of Waste Recycled (Monthly)	36.3%	35.9%	36.7%	38.4%	40.1%	43.9%	48.9%		April's recycling rate of 43.9% is 5% less than the monthly target. However, 8,352 tonnes of waste was recycled in April 2014, 31% higher than the 6,342 tonnes recycled in April 2013. Increases in both green waste and inert waste (soil and rubble through recycling centres) have contributed to the increase in April. The amount of waste arisings collected in 2013/14 was 218,481 tonnes - 1.2% less than the total tonnage of waste collected in 2012/13. The overall recycling rate in 2013/14 was 39.3% - an improvement of 1.4% on the 37.9% achieved in 2012/13. The Service is currently delivering a range of public engagement work to promote recycling, with particular emphasis on food waste.
Amount of Waste Landfilled (Monthly)	10,606	10,454	12,284	8,967	10,494	10,668	10,211		Landfill tonnage for April was 457 tonnes above target. This is 239 tonnes less than what we landfilled in April 2013. Last year (13/14) we sent 132,564 tonnes of waste to landfill - 3.4% less than in the previous year.
% of lighting repairs completed within 7 days	94.1%	81.6%	84.7%	96.2%	99%	96.4%	92%		Average time to complete: 1.6 Days
% of priority road defects repaired within 3 working days	62.8%	78.1%	90.9%	85.4%	70.2%	73.5%	92%		Number of priority defects for April was 452. Performance for April is >18% below our 92% target. Analysis of April's data reveals that following the introduction of new nightshift working arrangements, i.e. 18 April to 30 April 2014, 97.6% performance has been achieved. It is expected that this higher level of performance should be maintained.

Indicator	Oct-Dec 13	Jan-Mar 14	Target	Status	Latest Note	Back to corporate dashboard
CIMS	71	74	72		Figures relate to street cleaning performance for March 2014 (4th Quarter 2013/14). The 4th Quarter assessment results show Edinburgh achieving an above target citywide result of 74 against a street cleaning performance target of 72. This is an increase of 3 from the 3rd Quarter assessment.	
% of streets clean	95%	96%	95%		Figures relate to performance for March 2014 (4th Quarter 2013/14).	

Indicator	2011	2012	Target	Status	Latest Note
Road condition index	32.5%	34.0%	n/a		

Key						
	PI is below target and tolerances.		PI is below target but within tolerances.		On target.	 Data only.

Transport and Environment Committee

10am, Tuesday, 26 August 2014

Cleanliness of the City

Item number	8.2
Report number	
Executive/routine	Executive
Wards	All

Executive summary

In June 2014, Keep Scotland Beautiful (KSB) undertook the latest Cleanliness Index Monitoring System (CIMS) independent assessment of Edinburgh's street cleanliness. City of Edinburgh Council cleanliness targets for 2013/14 are a score of 72 with 95% of streets surveyed as clean. The national standard of cleanliness is a score of 67.

In this assessment, a cleanliness score of 70 was achieved, with 96% of streets surveyed achieving the nationally recognised standard of cleanliness. This was a small improvement on the June 2013 results where a score of 70 was achieved with 95% of streets classed as clean (Appendix 1 and 2).

Two out of six Neighbourhoods achieved a cleanliness score equal or greater to the city wide target of 72, a decline from June 2013, where three neighbourhoods achieved this (Appendix 4).

Links

Coalition pledges	P44
Council outcomes	CO7 , CO17 , CO19 , CO25 , CO26 , CO27
Single Outcome Agreement	SO4

Cleanliness of the City

Recommendations

It is recommended that Committee notes the contents of the report.

Background

- 2.1 CIMS are the method used by The City of Edinburgh Council to assess street cleanliness. KSB manages the CIMS scheme nationally and carries out four independent assessments each year. In June 2014, KSB undertook the latest CIMS independent assessment of Edinburgh's street cleanliness.
- 2.2 Each assessment is a snapshot of the cleanliness of the streets, with a 50 metre transect surveyed from a random sample of 10% of the city's streets. Each transect is graded on the presence of litter on a scale from 'A' to 'D' as detailed in the Code of Practice on Litter and Refuse (Scotland 2006). An 'A' grade indicates no litter whatsoever, whereas a 'D' grade signifies major accumulations along the transect. Grade A and B represent an acceptable standard of cleanliness, while Grade C and D are noted as unacceptable. The grades are then given a points value - from 3 points for an 'A' grade, to 0 points for a 'D' grade. The transect scores for each neighbourhood and ward are then aggregated up to a score out of 100. A score of 67 or above indicates that an area meets the national standard of cleanliness i.e. the majority of transects in that area were assessed as A or B. The same methodology is used for Local Environment Audit Management System (LEAMS), the statutory performance indicator for street cleaning, although a smaller sample of streets are assessed.
- 2.3 The City of Edinburgh Council cleanliness performance targets for 2014/15 are a citywide CIMS score of 72 with a secondary target of 95% of streets surveyed as clean.

3.1 The result of the June 2014 survey are summarised in Figure 1 below.

Neighbourhood	CIMS Score	% streets clean
West	72	96
South	71	100
South West	73	98
North	68	98
East	65	87
City Centre & Leith	67	92
City wide	70	96

Figure 1: Summary of June 2014 CIMS street cleanliness results

- 3.2 The overall CIMS score of 70 for this assessment is equal to that achieved in June 2013 (Appendix 1).
- 3.3 The Council achieved the nationally recognised standard of cleanliness (a score of 67), but fell short of the meeting the internal target of 72 (Figure 1).
- 3.4 This was a decline on the previous assessment undertaken in March 2014 where a score of 74 was achieved (Appendix 1).
- 3.5 The percentage of streets clean figure of 96% achieved in this assessment is an improvement on the 95% achieved in June 2013 and exceeds the council target of 95% of streets surveyed as clean (Appendix 2).
- 3.6 Of the six Neighbourhoods, five achieved or exceeded the national cleanliness target of 67. East Neighbourhood missed the National target by two points (Appendix 4).
- 3.7 Nine wards achieved a result of 100% clean for acceptable standards of cleanliness. This is an excellent result and a significant improvement from June 2013 where only five wards were assessed as 100% clean (Appendix 5).
- 3.8 Compared to June 2013, the number of unacceptable transects recorded (Grade C or D) remained the same at 5%.
- 3.9 Full details of the survey findings at a Neighbourhood and Ward level are detailed in sections 3.13 onwards and Appendix 5.

In summary, of the 17 wards:

6 Wards met or exceed the council target score of 72.

12 Wards met or exceeded the national standard of cleanliness score of 67.

4 Wards fell short of achieving the national standard of cleanliness score of 67.

3.10 Incidences of dog fouling across the city were recorded at 4%, down from 6% recorded in the previous survey undertaken in March 2014.

3.11 It should be noted that pedestrian derived litter constitutes the greatest source of litter in the city, with 86% of litter classed as originating from this source.

Confirm Environmental System

3.12 The Confirm on Demand Environmental system went live on 24 March 2014 for Street Cleaning Operations. All enquiries, service requests and information requests are now being logged and progressed through the system. Real time service requests now reach frontline operatives, and in turn updates to service requests are now available to our Contact Centre as the system is updated in the field. A performance and information framework is currently being developed which will allow local issues and trends to be monitored and will assist in identifying ways to improve the service through changes to operations or campaigns.

City Centre and Leith Neighbourhood – CIMS 67, 92% clean

3.13 The City Centre and Leith Neighbourhood achieved a score of 67 meeting the national acceptable standard for cleanliness. A total of 92% of streets were assessed as clean. Ward 11 (City Centre) failed to achieve the acceptable standard of cleanliness score by only two points, whilst Ward 12 (Leith Walk) and Ward 13 (Leith), both achieved scores above the national standard of cleanliness index score. Notably, 100% of streets surveyed were assessed as clean in Ward 12 (Leith Walk) during this survey. Overall a total of 75 transects were surveyed across the Neighbourhood of which six failed to meet the acceptable standard of cleanliness.

3.14 Ward 11 (City Centre) received a score of 65 with 87% of transects noted as clean. Five locations in this ward failed to meet the acceptable standard of cleanliness. Notably four out of five of these locations assessed failed because of domestic waste spillage or fly tipping of domestic waste. Cigarette litter remains an issue in areas of high footfall. All streets surveyed around the High Street met or exceeded the acceptable level of cleanliness.

3.15 Ward 12 (Leith Walk) scored 71 with 100% of streets assessed as clean. This is two points up on the previous survey and four points above the national acceptable standard. Two streets achieved grade A standard, Springfield Street and Boat Green.

- 3.16 Ward 13 (Leith) scored 68 with 95% of streets assessed as clean. Although one point down on last survey, the target for percentage of streets clean continues to be achieved in this ward. This assessment shows an improvement from June last year, where a score of 65 was achieved with 88% of streets being assessed as clean. Only one location at Crown Place did not meet the acceptable standard of cleanliness due to accumulations of cigarette ends and a drinks container.
- 3.17 In the New Town the roll out of containerised waste collection continues with over 7700 properties already using either bins or Gull Proof Sacks, with nearly 1200 properties receiving bins week commencing 23 June and a further 2750 properties are planned to get bins before the end of the year. This should help towards improving the cleanliness of streets in Ward 11.
- 3.18 To mitigate the impact of trade waste on city centre streets, a new approach to manage trade waste continues to be trialled in three pilot areas (Rose Street and surrounding lanes, Leith Walk and the High Street), with business waste only permitted on street at certain times. Enforcement is being carried out to ensure that businesses take responsibility for their waste. Following the initial implementation phase, Leith Walk and the High Street are noticeably less cluttered, with the numbers of bins permanently stored on street significantly reduced as a result. Anecdotal evidence suggests these streets are already appearing cleaner and this CIMS result would appear to evidence this assertion.
- 3.19 Better use of the new Confirm software which maps known issues as recorded by the Contact Centre, has allowed identification of areas of concern by subject type and the targeting of resources to these locations accordingly.
- 3.20 For the period 1 April – 23 June there were 108 Fixed Penalty Notices (FPNs) issued for littering offences by the Neighbourhood Environmental Wardens and 93 FPNs issued by the Edinburgh Wardens within Wards 11, 12 & 13. In total there were 201 FPNs issued for littering offences.
- 3.21 A joint initiative was taken on Friday 9 May with Essential Edinburgh, which manages the Business Improvement District within Ward 11, and Keep Scotland Beautiful in relation to tackling cigarette litter. In addition, there is a schedule of Shipshape Clean-up days arranged over the next few months focusing on improving the appearance of local areas.

North Neighbourhood - CIMS 68, 98% clean

- 3.22 The North Neighbourhood received an overall score of 68. Ward 4 (Forth) achieved a CIMS score of 66 and Ward 5 (Inverleith) achieved a score of 71.
- 3.23 The internal percentage clean target of 95% was achieved for both wards with only one 'C' grade found. Ward 4 (Forth) nearly met, and Ward 5 (Inverleith) exceeded the national standard of cleanliness score of 67.

- 3.24 The data shows that none of the streets surveyed in Ward 4 (Forth) and 7% of streets in Ward 5 (Inverleith) achieved an 'A' grade.
- 3.25 Litter in Pennywell Gardens meant only 96% of the streets surveyed in Forth met the minimum standard (while 100% of streets met the standard in Inverleith). The survey noted an increase in smoking-related litter, especially in Forth Ward compared to Inverleith Ward. The neighbourhood will look at an initiative focussing on smoking-related litter over the coming months with the Environmental Wardens.
- 3.26 The assessors commented on weed growth during the inspection. The first weed treatment for the year has nearly been completed; however, some of the streets which were treated earlier in the year are beginning to show subsequent weed growth that requires a follow-up treatment or manual removal as appropriate.

East Neighbourhood, CIMS Score 65 – 87% clean

- 3.27 The East Neighbourhood received a score of 65 with 87% of streets assessed as clean. This score is two points below the national standard and is a disappointing result. The breakdown of grades was A (4%); B+ (9%); B (74%); C (13%) and D (0%).
- 3.28 Ward 14 (Craigintinny & Duddingston) achieved a score of 68, one point above the acceptable standard of cleanliness score with 95% of streets assessed as clean. One street (Mountcastle Loan) failed to meet the acceptable standard of cleanliness score due to significant litter found trapped between the back line of a pavement and fence. The surrounding pavements and roads were noted by the assessors as having being cleaned to a good standard.
- 3.29 Ward 17 (Portobello & Craigmillar) scored 63 with 81% of streets assessed as clean. This is a disappointingly low result when compared to the average score for this Ward over the last year – 73 with 98% of streets clean. In this assessment, five streets failed to meet the acceptable standard of cleanliness during this survey: Peffermill Road (litter along back line at bus stop); Craigmillar Castle Avenue (escaped domestic waste and litter around bins); Windsor Place (fast food wrappers in road channel); Williamfield Square (litter on grass area adjacent to parked cars); Adelphi Grove (litter in road channel). All sites reported by the assessors on the day were recovered to an acceptable standard of cleanliness soon after reporting.
- 3.30 The Neighbourhood team will be working closely with the Environment Services Support Unit to look further at the detail of these results to identify any operational improvements and/or enforcement activities required.
- 3.31 Recently the Environmental Wardens have focussed on two areas within the East Neighbourhood to tackle the ongoing issue with dog fouling. In Ward 14

(Niddrie, Bingham and Magdalene) 31 FPNs were issued (26 relating to dog fouling and five relating to litter). In Ward 17 (Restalrig) 12 FPNs were issued (11 relating to dog fouling and one relating to litter).

- 3.32 The Neighbourhood team continues to work closely with partners to improve cleanliness standards across the East Neighbourhood area. Prior to this survey five clean-up events took place throughout May across the Neighbourhood. In Ward 17 volunteers carried out a clean-up of the Innocent Railway path; a community clean-up was carried out at Rosefield Park as part of the Clean Europe Day; and a clean-up event involving 80 volunteers took place at Craigmillar Castle Park. In Ward 14, Park Rangers held a litter picking event at the railway embankment in Figgate Park and a wider clean-up event in Figgate Park involving staff from McDonalds and pupils from Duddingston Primary School.

South West Neighbourhood, CIMS Score 73 – 98% clean

- 3.33 The South West Neighbourhood achieved a score of 73. A total of 83 transects were surveyed during this assessment with only two failing to reach the acceptable standard.
- 3.34 Three wards achieved the national cleanliness target of 67, with two wards also achieving the internal target of 72. Three wards achieved a 100% clean result.
- 3.35 Of the 83 transects surveyed, only two “C” grades were noted which is lower than recent surveys, however the overall score also dropped due to a reduction in “A” grades, down from 32% to 13%.
- 3.36 Smoking related litter continues to account for the majority of the litter found, although drinks and confectionary debris are still significant. The Environmental Wardens will be involved in a group review of this data to plan where best to concentrate their future efforts.

South Neighbourhood, CIMS Score 71 – 100% clean

- 3.37 The South Neighbourhood achieved a cleanliness index score of 71, slightly disappointing given that the area achieved a 100% clean result. The previous percentage clean result for the South in March was 94%, with an overall cleanliness index result of 78.
- 3.38 Ward 10 (Morningside) achieved a result of 73 (down 6 points from March), Ward 15 (Southside/Newington) achieved a result of 71 (up 2 points from March) and Ward 16 (Liberton/Gilmerton) received a score 70, a 14 point decrease from March 2014.
- 3.39 In achieving a 100% clean score, all 3 Wards in the South Neighbourhood exceeded the targets relating to percentage of streets clean. In regards to the

cleanliness index, Ward 10 exceeded the target with a score of 73. Wards 15 and 16 just below target with 71 and 70 respectively.

- 3.40 The South Task Force focused on achieving and maintaining an acceptable standard of cleanliness throughout the Neighbourhood. An emphasis was placed on monitoring and concentrating efforts to achieve grade B or above. During this survey the team worked to try and provide comparative cleansing standards across all ward areas, in general this has been achieved.
- 3.41 The South team continue to operate a 'blitz' clean to areas. This type of cleaning proves to be efficient as it uses both mechanical and manual sweeping with all resources focusing on a particular area. This will include litter picking of open space areas, street sweeping (manually and mechanically), weed treatment, back edge treatment and removing fly tipping where noted. The South has once again achieved a very good result in the percentage clean overall, with successful increased concentration on Ward 15 (100% clean and 73 index score) where the heavy footfall in this particular area provides some difficulties in achieving high standards of cleanliness.

West Neighbourhood, CIMS Score 72 – 96% clean

- 3.42 The West Neighbourhood achieved an overall cleanliness index score of 72 with 96% of streets surveyed meeting acceptable cleanliness standards.
- 3.43 Ward 1 (Almond) achieved a CIMS score of 72 with a 95% clean result, Ward 3 (Drum Brae/Gyle) achieved a result CIMS score of 72 with a 95% clean result and Ward 6 (Corstorphine/Murrayfield) achieved a CIMS score of 73 with a positive 100% streets clean result.
- 3.44 Unfortunately, three of the 85 sampled streets failed to meet the appropriate standards with one D grade result and two C grade results. The D grade result related to drinks and fast food litter on Huly Hill in Newbridge, with the majority of litter observed on private property. Contact will be made with the landowners to raise awareness of this issue again to prompt further attention. The C Grade results related to general litter issues in residential areas.
- 3.45 The West Neighbourhood Environmental Wardens carried out various initiatives from April to June to tackle dog fouling and fly-tipping issues across the West Neighbourhood area, including Kirkliston, Clermiston and Queensferry.
- 3.46 The West Neighbourhood has also delivered successful local operations in partnership with Police Scotland and Scottish Fire and Rescue, to deal with fly-tipping in communal stairs and around domestic waste/recycling containers. A recent amnesty programme was delivered in the Clermiston area to encourage residents to dispose of large items responsibly. During this programme a considerable number of dumped items were loaded by residents on to cages in areas where dumped items have historically been an issue.

3.47 In addition, the Environmental Warden team has focused on reported littering and dog fouling issues in Cramond, Maybury and Silverknowes. FPN's have been issued to private individuals and commercial organisations where environmental crimes have been identified.

Measures of success

4.1 To achieve a city wide CIMS score of 72.

Financial impact

5.1 There is no financial impact from this report.

Risk, policy, compliance and governance impact

6.1 There is no risk, policy, compliance or governance impact from this report.

Equalities impact

7.1 The achievement of high cleanliness standards throughout the city fosters good relationships between the Council and residents through the provision of high quality services. It can also lead to safer routes free from potential obstructions and trip hazards for all pedestrians, particular those with visual impairments.

Sustainability impact

8.1 None

Consultation and engagement

9.1 None

Background reading/external references

www.keepsotlandbeautiful.org

John Bury

Acting Director of Services for Communities

Contact: Gail Rankin, Service Information & Performance Manager

E-mail: gail.rankin@edinburgh.gov.uk | Tel: 0131 529 2703

Links

Coalition pledges	P44 - Prioritise keeping our streets clean and attractive.
Council outcomes	CO7 - Edinburgh draws new investment in development and regeneration. CO17 - Clean – Edinburgh’s streets and open spaces are free from litter and graffiti. CO19 - Attractive places and well maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards. CO25 - The Council has efficient and effective services that deliver on objectives. CO26 - The Council engages with stakeholders and works in partnership to improve services and deliver on agreed objectives. CO27 - The Council supports, invests and develops our people.
Single Outcome Agreement	SO4 - Edinburgh’s communities are safer and have improved physical and social fabric.
Appendices	Appendix 1 - Edinburgh Street Cleanliness CIMS score March 13 – March 14. Appendix 2 - Percentage of Streets Clean Score March 13 - March 14. Appendix 3 - Cleanliness by Neighbourhood Area March 13 - March 14.

Appendix 4 - Cleanliness by Neighbourhood Area

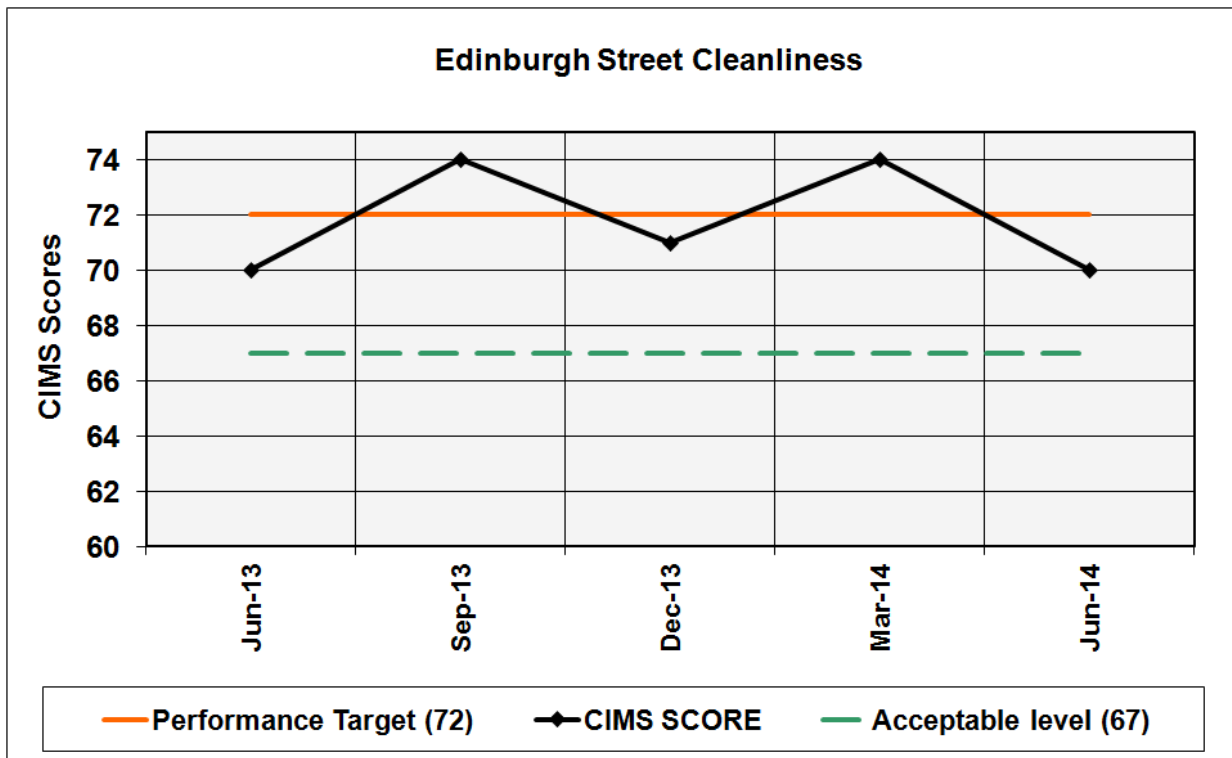
March 13 – March 14.

Appendix 5 - Cleanliness by Ward

March 13 – March 14.

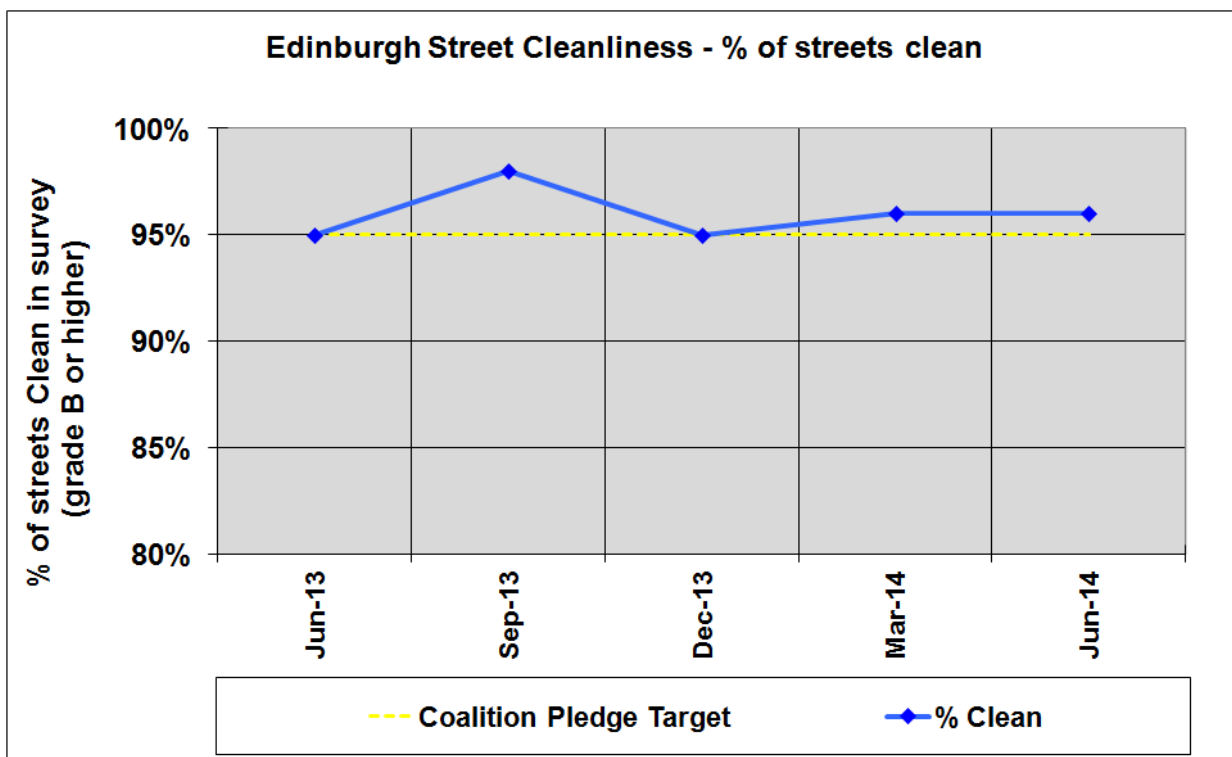
Appendix 1

Edinburgh Street Cleanliness – CIMS Score (June 13 – June14)



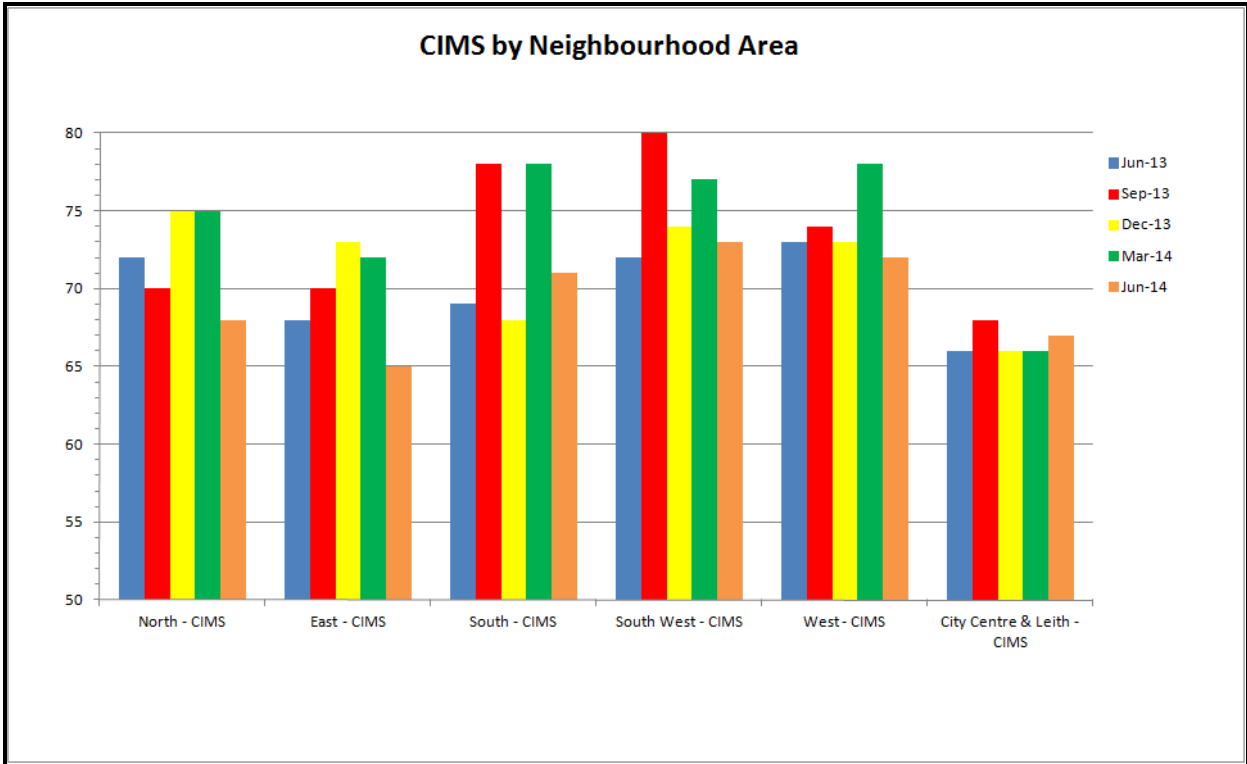
Appendix 2

Edinburgh Street Cleanliness – % clean score (March 13 – March 14)



Appendix 3

Cleanliness by Neighbourhood – CIMS (June 13 – June 14)



Appendix 4

Cleanliness by Neighbourhood – CIMS (June 13 – June 14)

Neighbourhood	Jun-13	Jun-13	Sep-13	Sep-13	Dec-13	Dec-13	Mar-14	Mar-14	Jun-14	Jun-14	Comparison with previous survey	Comparison with previous survey	Comparison Year on Year	Comparison Year on Year	Acceptable level (>67) (Y/N)	Mtg coalition target (95%) (Y/N)
	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean
North	72	94%	70	94%	75	98%	75	100%	68	98%	↓	↓	↓	↑	Y	N
East	68	89%	70	95%	73	98%	72	94%	65	87%	↓	↓	↓	↓	Y	N
South	69	98%	78	100%	68	92%	78	94%	71	100%	↓	↑	↑	↑	Y	N
South West	72	95%	80	98%	74	97%	77	93%	73	98%	↓	↑	↑	↑	Y	Y
West	73	98%	74	99%	73	96%	78	100%	72	96%	↓	↓	↓	↓	Y	Y
City Centre	66	92%	68	94%	66	92%	66	94%	67	92%	↑	↓	↑	↑	Y	N
CITYWIDE	70	95%	74	98%	71	95%	74	96%	70	96%	↓	→	→	↑	Y	N

Appendix 5

Cleanliness by Ward (June 13 – June 14)

Ward	Area	Jun-13	Jun-13	Sep-13	Sep-13	Dec-13	Dec-13	Mar-14	Mar-14	Jun-14	Jun-14	Comparison with previous survey	Comparison with previous survey	Comparison Year on Year	Comparison Year on Year	Mtg coalition target (95%) (Y/N)
		CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	CIMS	% Clean	% Clean
1. Almond	W	75	96%	77	100%	74	94%	80	100%	72	95%	↓	↓	↓	↓	Y
2. Pentland Hills	SW	74	94%	76	97%	73	97%	87	97%	81	100%	↓	↑	↑	↑	Y
3. Drum Brae / Gyle	W	72	100%	73	96%	71	100%	73	100%	72	95%	↓	↓	→	↓	Y
4. Forth	N	68	90%	68	96%	79	100%	71	100%	66	96%	↓	↓	↓	↑	N
5. Inverleith	N	75	97%	72	92%	73	97%	79	100%	71	100%	↓	→	↓	↑	N
6. Corstorphine / Murrayfield	W	71	100%	71	100%	71	96%	79	100%	73	100%	↓	→	↑	→	Y
7. Sighthill / Gorgie	SW	66	92%	70	96%	72	100%	64	81%	66	91%	↑	↑	→	↓	N
8. Colinton / Fairmilehead	SW	74	100%	91	100%	83	100%	83	100%	73	100%	↓	→	↓	→	Y
9. Fountainbridge / Craigleith	SW	75	95%	86	100%	69	91%	71	96%	71	100%	→	↑	↓	↑	Y
10. Meadows/ Morningside	S	68	96%	81	100%	69	93%	79	96%	73	100%	↓	↑	↑	↑	Y
11. City Centre	CC	66	93%	70	93%	64	90%	63	89%	65	87%	↑	↓	↓	↓	N
12. Leith Walk	CC	68	95%	68	95%	68	95%	69	100%	71	100%	↑	→	↑	↑	N
13. Leith	CC	65	88%	67	96%	67	92%	69	96%	68	95%	↓	↓	↑	↑	N
14. Craigentinny / Duddingston	E	62	78%	69	93%	71	96%	69	92%	68	95%	↓	↑	↑	↑	N
15. Southside / Newington	S	68	96%	76	100%	67	90%	69	86%	71	100%	↑	↑	↑	↑	N
16. Liberton / Gilmerton	S	72	100%	78	100%	68	94%	84	100%	70	100%	↓	→	↓	→	N
17. Portobello / Craigmillar	E	75	100%	70	96%	74	100%	74	96%	63	81%	↓	↓	↓	↓	Y
Overall		70	95%	74	98%	71	95%	74	96%	70	96%	↓	→	→	↑	N

Transport and Environment Committee

10am, Tuesday, 26 August 2014

Landfill and Recycling

Item number	8.3
Report number	
Executive/routine	
Wards	All

Executive summary

This report updates the Committee on performance in reducing the amount of waste being sent to landfill and increasing recycling.

The positive trend in performance is continuing, with the amount of waste sent to landfill in April and May 2014 reducing by 5% compared to the same period last year.

Taking into account seasonal factors, it is anticipated that 124,956 tonnes will be sent to landfill in 2014/15, 7608 tonnes or 5.7% less than in 2013/14. Further, it is anticipated that the year end recycling figure will be 41.5%, an increase of 2.2% on 13/14.

This report also includes an update on complaint figures. In the first 2 months of financial year 14/15 (April & May), there have been on average 513 complaints per week. This is 9% less than for the same period in 2013/14. With around 460,000 collections per week, this equates to a complaint occurring in 0.12% of collections in April and May.

Links

Coalition pledges	P44 , P49 , P50
Council outcomes	CO17 , CO18 , CO19
Single Outcome Agreement	SO4

Landfill and Recycling

Recommendations

It is recommended that Committee notes the contents of the report.

Background

2.1 At the meeting of the Transport and Environment Committee on 15 January 2013, members requested regular updates on performance in reducing the amount of waste sent to landfill and increasing recycling.

Landfilled Waste and Recycling

2.2 The *improve it* Programme aimed to deliver transformational change in a number of environment services including Waste Services. Amongst the most significant waste targets was the aim to reduce landfill tonnages to 118,000 tonnes (from 147,668 tonnes in 2011/12), and increase the percentage of waste that is recycled to 50%.

2.3 Significant progress in implementing the changes required to deliver both service improvements and landfill savings have been made, including the implementation of managed weekly collections in September 2012.

Complaints

2.4 At the Transport and Environment Committee meeting on 27 August 2013, members requested that the performance reports also include updates on complaints made about waste services.

2.5 There are 236,000 properties in Edinburgh which receive multiple refuse and recycling collections. On average there are approximately 90,000 collections a day and 460,000 collections a week. Current complaint targets are based on the number of collections carried out, but are not adjusted for seasonal variation.

Main report

Landfill Waste

- 3.1 Landfill tonnage to date (April & May 2014) is 21,382 tonnes - this is a reduction of 1,144 tonnes, or 5.1% on the same period in 2013/14 (Table 1).
- 3.2 The projection for landfill to the year end, taking into account seasonal fluctuations, is currently 124,956 tonnes. This would be a reduction of 5.7%, or 7,608 tonnes on the year 2013/14. With landfill costs of £110 per tonne, this reduction represents an anticipated saving of some £836,880.

	YTD April & May 2014	YTD April & May 2013	Difference		14/15 Target	14/15 Year End Forecast	13/14 Year End Actual	Forecast difference to 13/14	
			Tonnes	%				Tonnes	%
Landfill	21,382	22,526	-1144	-5.1%	118,000	124,956	132,564	-7,608	-5.7%

Table 1: Landfill Tonnages – actual YTD and anticipated 14/15 & 13/14

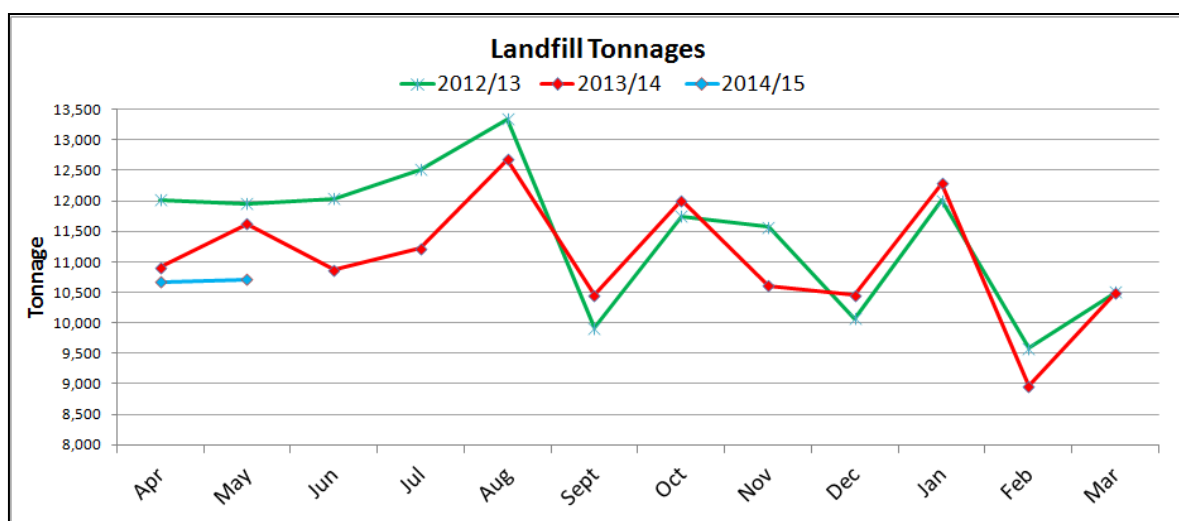


Chart 1: Landfill tonnages 12/13, 13/14 & 14/15

- 3.3 10,715 tonnes of waste was landfilled in May 2014. This is a decrease of 7.8% compared to May 2013. Table 2 details the trend in monthly landfill tonnages compared to 2013/14.

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
2013/14	10,907	11,619	10,871	11,220	12,676	10,455	12,011	10,606	10,454	12,284	8,967	10,494
2014/15	10,667	10,715										
% difference	-2.2%	-7.8%										

Table 2: Landfill comparison per month

- 3.4 The total tonnage of waste has been falling each year, with the total amount of waste in 2013/14 being 1.2% less than 2012/13. Waste arisings in April and

May 2014 are above that experienced in 2013/14 (Chart 2) however, it is anticipated that for 2014/15 overall, the falling trend will continue.

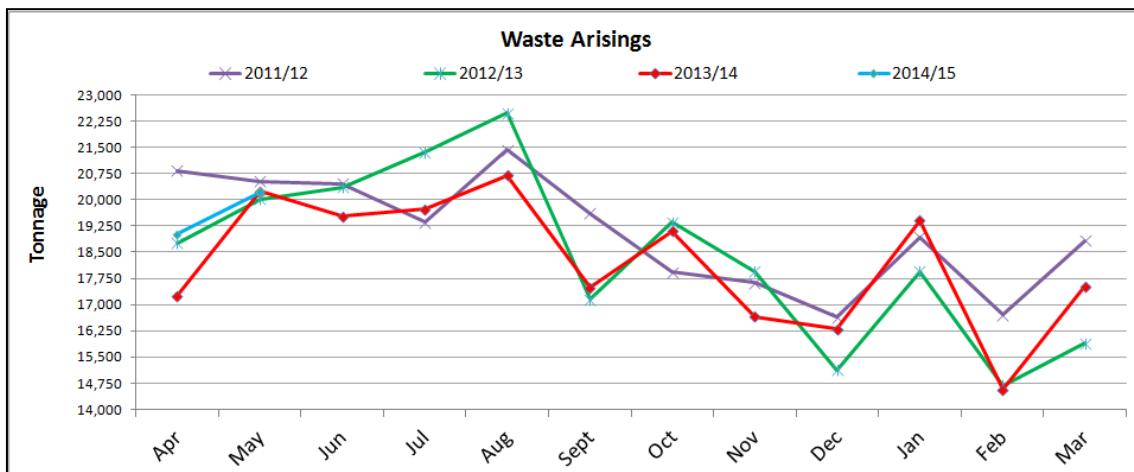


Chart 2: Total Waste Tonnages 2011/12 – 2014/15

Recycling

3.5 The percentage of waste recycled (including street sweepings) for April and May 2014 is 45.5% compared to 39.9% for the same period in 2013/14 – an increase of 5.6% (Table 3 and Chart 3).

	YTD 2014 (April & May)		YTD 2013 (April & May)		Difference	
	Tonnes	% Rate	Tonnes	% Rate	Tonnes	% Rate
Recycling	17,856	45.5%	14,954	39.9%	2,902	5.6%

Table 3: Percentage of waste recycled 2013/14 & 2014/15

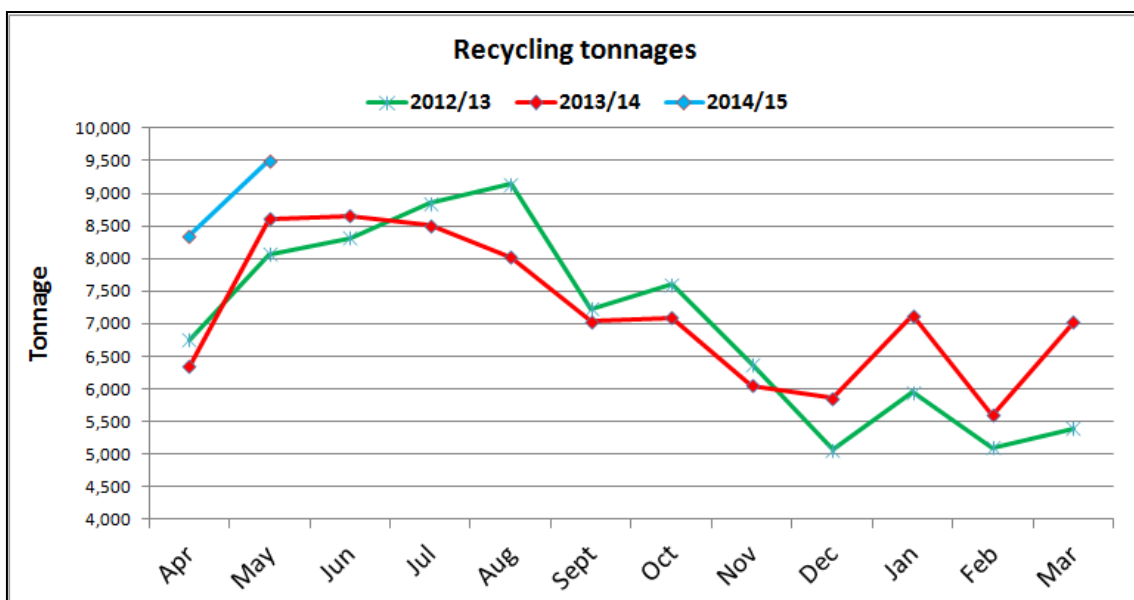


Chart 3: Recycling Tonnages 12/13, 13/14 & 14/15

3.6 A comparison of monthly recycling percentages for the last 3 years (Chart 4) illustrates that recycling percentages have shown significant improvement in recent years.

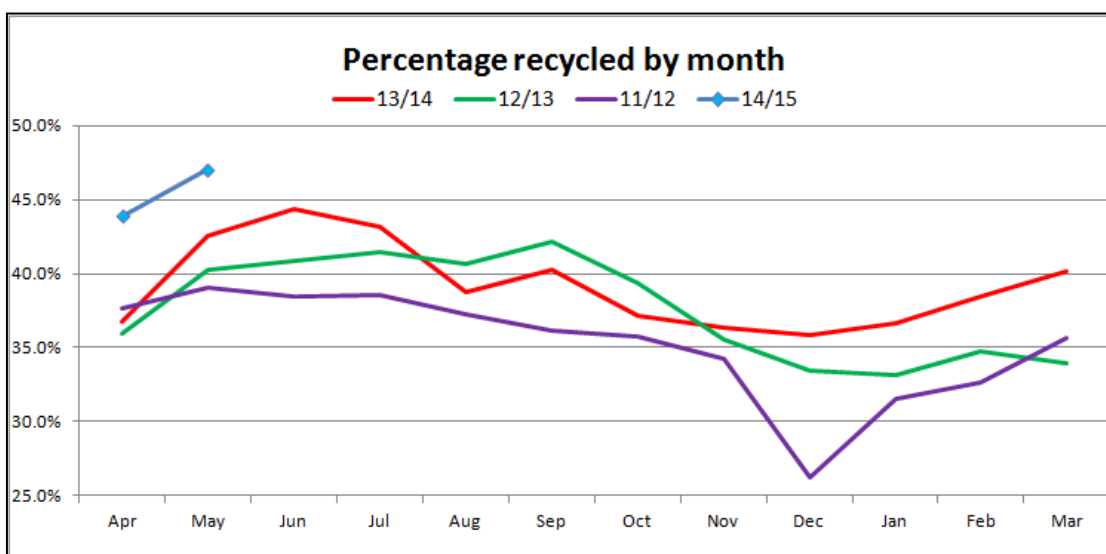


Chart 4: Percentage Recycled by month 11/12, 12/13, 13/14 & 14/15

3.7 Table 4 provides further details of recycling tonnage broken down by recycling schemes.

Scheme	YTD 2014/15	YTD 2013/14	Difference	% difference
Kerbside Blue/Red Boxes	2414	2467	-53	-2.1%
Garden Waste	5526	4015	1511	37.6%
Food Waste	942	848	94	11.1%
Recycling Banks (textiles, books, glass & paper banks)	1062	1146	-85	-7.4%
Packaging Banks	597	535	62	11.6%
Communal Paper bins	295	315	-19	-6.1%
Trade	675	716	-42	-5.8%
CRC	4871	3291	1581	48.0%
Special Uplifts	626	598	27	4.6%
Other	84	91	-7	-7.9%
Street Sweepings	764	931	-168	-18.0%
Total Recycling	17856	14954	2902	

Table 4: Year to date (April & May) recycling by scheme 2014/15 & 2013/14

3.8 Year to date, food waste has shown an 11.1% increase in tonnage collected. Food waste has been the subject of a specific campaign focused on increasing

the use of the service, with particular emphasis placed on overcoming perceptions relating to cleanliness, convenience and the need to divert even small amounts of food waste.

- 3.9 A large increase has been recorded against kerbside collected garden waste. The service has experienced a high demand this year in, both April and May, and the tonnage collected is 36.7% greater than for the same period last year.
- 3.10 Community recycling centres (CRC) have experienced a 48% increase in recycled tonnage year to date. This increase is largely due to the introduction of new contracts to extract recyclable material deposited in residual waste skips at CRC sites and in public litter bins. Both of these new waste streams are included in the CRC recycling figures in Table 4. Waste amounting to 2221 tonnes has been processed through these contracts this year (April & May 2014) with 1571 tonnes being recycled and diverted from landfill. It is anticipated that in the full year 2014/15, 5,500 tonnes will be recycled via these contracts that, in previous years, would have been sent to landfill. This recycling stream contributes to more than 2% of the anticipated year end recycling rate.
- 3.11 Following approval of the outline business case by this Committee on 27 August 2013, a new bin and box kerbside recycling service will replace the red and blue box scheme in a phased programme, commencing in September 2014. The new service, which will collect a wider range of materials, will be easier to use and will provide increased recycling capacity. It is anticipated that once fully rolled-out, the new service will increase the overall recycling rate to in excess of 46.3%.
- 3.12 Committee also requested that further work be undertaken to identify the most effective and affordable option for enhancing and expanding communal recycling provision in the high density and tenemental housing areas of the city. Following approval at the 18 March 2014 meeting, Waste Services will be piloting different approaches to communal recycling commencing in Autumn 2014.

Complaints

- 3.13 Weekly complaint numbers since 2011 are shown in Chart 5. The peak in complaints, in September 2012, was associated with the implementation of new refuse collection routes. Overall, there has been a downward trend in complaint numbers since that time. When comparing complaint numbers with previous years, it should be noted that food waste collections were piloted from spring 2011 and rolled-out across the city more widely during 2012/13 to some 150,000 kerbside customers who now receive a weekly service.

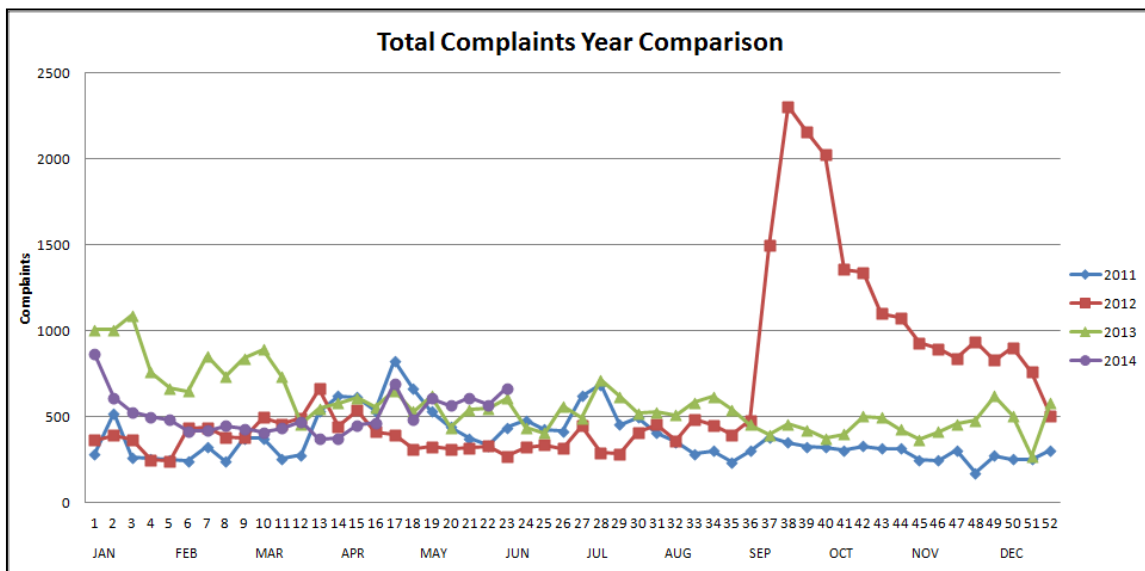


Chart 5: Total complaints per week 2011 – 2014

3.14 On average in April and May 2014, there were 513 complaints a week, 9% less than for the same period last year. The service received 2281 complaints in the month of May against a target of 1632 (40% more than target). With approximately 460,000 collections a week in May, this translates to 0.12% of collections resulting in a customer complaint.

3.15 It is acknowledged that there is never an acceptable level of complaints and Waste Services continue to work hard to reduce complaint numbers. A breakdown of missed collection complaints for April and May 2014 is detailed in Chart 6. As well as dealing with complaints at an individual level, particular focus is now placed on householders who have had cause for a repeat complaint and those customers who receive assisted collections.

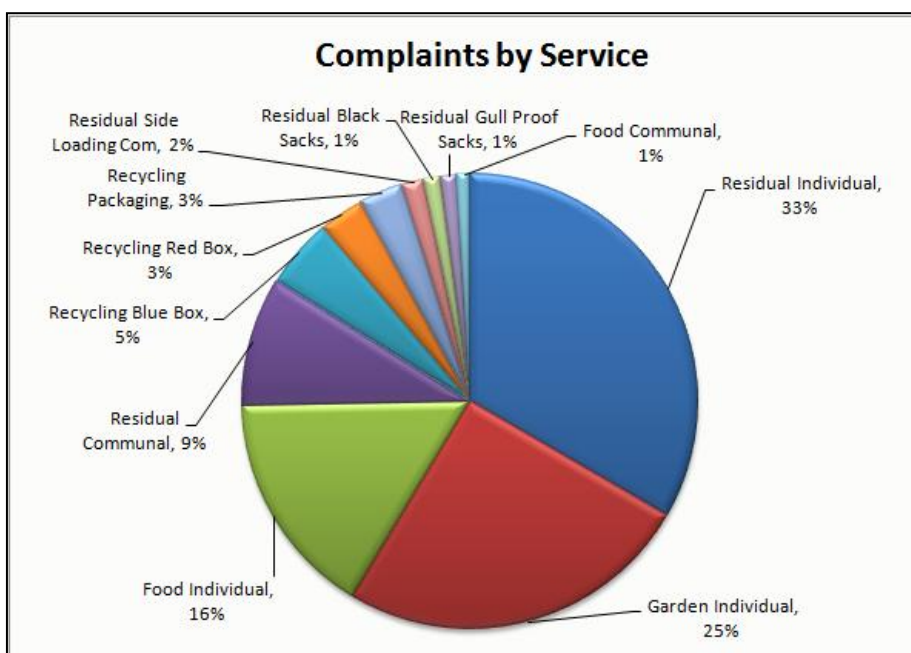


Chart 6: Missed collection complaints – April & May 2014 by collection service

- 3.16 The Confirm On Demand Environmental system went live in Waste Services and the Contact Centre as scheduled on 16 December 2013. All enquiries, service requests and information requests are now being logged and progressed through the system, with assets now being maintained using Confirm. Phase II of Confirm (Confirm connect mobile) is now fully rolled-out and crews are using mobile devices to carry out routine and ad hoc work and provide real time information on collection route completion.
- 3.17 Training for Neighbourhood customer service teams is soon to commence and the Neighbourhood offices will shortly begin logging waste enquiries through Confirm On Demand.

Measures of success

- 4.1 Achievement of the Council's targets for increasing recycling and reducing landfill.

Financial impact

- 5.1 Landfill and recycling tonnages are in line with budget projections.

Risk, policy, compliance and governance impact

- 6.1 The information contained in this report is a review of the current performance of landfill and recycling. This report does not impact on any existing policies and no risks have been identified pertaining to health and safety, governance or compliance. Further, there are no regulatory implications that require to be taken into account.

Equalities impact

- 7.1 The Council is meeting its public sector duty to advance equal opportunity for residents to recycle by using a range of communications methods. Written information is available through leaflets and electronic media. Road shows and door knocking visits provide face to face contact with residents and visits from recycling advisers are available on request. All material can be translated on request. Consultation was carried out via demographically representative focus groups and via on line and written questionnaires to ensure that a full and representative range of views were obtained. Assistance with the presentation of recycling and waste containers is available for those who require it to ensure everyone has access to these services. The above has ensured that information is available for all within the equality and rights framework.

Sustainability impact

- 8.1 Increased recycling will help to divert waste from landfill and support the achievement of greenhouse gas reduction targets, and reductions in local environmental impact.

Consultation and engagement

- 9.1 A range of public engagement work is ongoing to promote recycling. In April this year a major food waste recycling campaign was completed that included reminder leaflets to all 210,000 householders who receive the service, and a range of events at local supermarkets engaging with 1,192 residents. There was also a continuous programme of door knocking to more than 70,000 households across the city. Sales of compostable liners in our libraries have doubled in quarter four of 2013/14, compared to quarter three 2013/14.
- 9.2 Waste services is now beginning engagement and communications work for the new kerbside recycling service. Events are being run across the city throughout the summer, joining existing community events wherever possible. This is being complemented by door knocking in target areas where residents may be struggling to manage their waste.
- 9.3 A series of briefings with key stakeholders and customer facing staff have been carried out to help support people through the change. A communications campaign is also being run which includes leaflets and information packs being sent to residents with instructions on how the service will work and a new calendar. This is being supported by additional signage, targeted media work and social media activity.
- 9.4 For areas of high density, such as flats and tenements with shared bins, communications and engagement for the pilot projects that will be running in Autumn 2014 is currently being planned. This will include monitoring and evaluation to ensure residents feedback is captured as to any changes that may be implemented in future.

Background reading/external references

N/A

John Bury

Acting Director Services for Communities

Contact: Andy Williams, Service Support Unit Manager

E-mail: andy.williams@edinburgh.gov.uk | Tel: 0131 469 5660

Transport and Environment Committee - 26 August

Links

Coalition pledges	P44 – Prioritise keeping our streets clean and attractive P49 – Continue to increase recycling levels across the city and reducing the proportion of waste going to landfill P50 – Meet greenhouse gas targets, including national target of 42% by 2020
Council outcomes	CO17 – Clean – Edinburgh’s streets and open spaces are free of litter and graffiti CO18 – Green – We reduce the local environmental impact of our consumption and production CO19 – Attractive Places and Well maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards and maintenance of infrastructure and public realm
Single Outcome Agreement	SO4 – Edinburgh’s communities are safer and have improved physical and social fabric
Appendices	N/A

Transport and Environment Committee

10.00am, Tuesday, 26 August 2014

Parking in the Telford Area, Results of Informal Consultation

Item number	8.4
Report number	
Executive/routine	Executive
Wards	5 – Inverleith

Executive summary

At its meeting of 29 October 2013, the Transport and Environment Committee considered a report, on the progress of Priority Parking proposals in various areas. Among the areas under consideration, was the area north of Telford Road.

The response from the Telford area to the initial consultation was inconclusive, with few responses received and no clear indication of whether residents supported the concept of Priority Parking. After consulting with the elected members for the Inverleith Ward and the Community Council, it was decided to conduct a further consultation, in order to elicit more responses from residents of this area.

This report details the results of the second informal consultation, on proposals to introduce Priority Parking in the Telford area.

Links

Coalition pledges

Council outcomes [CO22](#), [CO23](#), [CO24](#) and [CO26](#)

Single Outcome Agreement [SO4](#)

Parking in the Telford Area, Results of Informal Consultation

Recommendations

- 1.1 It is recommended that Committee:
 - 1.1.1 approves the commencement of the Traffic Regulation Order (TRO) and design processes, required to introduce Priority Parking, in the Telford area; and
 - 1.1.2 approves the commencement of the TRO process to introduce lengths of yellow line in various locations around the Telford area.

Background

- 2.1 At its meeting of 29 October 2013, the Transport and Environment Committee considered a report that detailed the results of an informal consultation into the possibility of introducing Priority Parking, in the Telford area.
- 2.2 There was a low response rate to the consultation and it gave little indication of public opinion on parking in the area. Following discussions with the elected members for the Inverleith Ward, on 21 May 2013, it was decided that further investigation into parking pressures within the area was warranted.
- 2.3 The Drylaw/Telford Community Council arranged a public meeting on 31 March 2014, to gauge opinion on the extent of perceived parking problems and the suitability of Priority Parking as a solution.
- 2.4 The meeting was well-attended and it was considered that there was sufficient indication of support to justify a second informal consultation, supported and assisted by the Community Council. This report details the results of this second consultation.

Main report

- 3.1 The initial investigation into Priority Parking in Telford included an informal consultation, where residents and businesses within the area were invited to indicate their support or opposition to the notion of Priority Parking. This initial exercise elicited 58 responses, a relatively low response rate compared to other areas.

- 3.2 A meeting was held with the Inverleith Ward elected members on 21 May 2013 to discuss the results of the consultation. It was suggested by the Councillors that the outcome did not accurately reflect the difficulties expressed to them by residents living in the area. The elected members had received separate representations indicating that there were strong feelings regarding parking in the area, which the consultation responses appeared not to contain.
- 3.3 On that basis, it was agreed that contact be made with the Community Council in order to gauge whether there was merit in undertaking a further consultation. The Community Council responded positively and organised a public meeting on 31 March 2014 to discuss parking issues in the Telford area.
- 3.4 The event was attended by approximately 100 residents, elected members and Council officials, with the resulting discussions being generally in favour of the introduction of Priority Parking.
- 3.5 With the assistance of the Community Council it was decided to repeat an informal consultation. This second consultation started on 9 June 2014, when all properties in the area received a letter from the Council, and ran until 27 June 2014. The letter asked for residents' views on parking pressures and if they supported the introduction of Priority Parking to help resolve those problems.
- 3.6 The Community Council and elected members visited households to inform people about the discussions and to encourage them to respond to the consultation.
- 3.7 During the consultation period 156 responses were received and 154 respondents supported the introduction of Priority Parking whilst two people did not.
- 3.8 The 156 responses represent a return rate, as a percentage of households within the area, of 23%, which is around average for a consultation of this nature.
- 3.9 A breakdown of the responses received per street is provided in the table below.

Table 1: Informal Consultation Responses by Street

Street	Responses
Telford Drive	99
Telford Road	23
Telford Place	17
Telford Gardens	7
Telford March	3
Telford Grove	1
Unknown	6
Total	156

- 3.10 Further consideration of the individual comments received during the informal consultation is contained within Appendix One: Informal Consultation Responses.
- 3.11 From the 156 responses received; 147 were standard letters issued by the Community Council for residents to complete and return to the Council. A copy of the standard letter is also provided within Appendix Two for information.
- 3.12 It is noted that from the 156 responses, 39 did not clearly include their full, or in part, name and address details that would allow the Council to verify the responses if necessary. For instance; house numbers were omitted, street names were incomplete or signatures were illegible.
- 3.13 Even removing such responses from consideration there remain 115 residents who support the introduction of the Priority Parking, compared to two people who opposed the proposals.
- 3.14 The result of the consultation indicates that the residents who responded were overwhelmingly in favour of introducing the Priority Parking scheme. On this basis, it is recommended to start the TRO process that is necessary to introduce the Priority Parking scheme in the Telford Area.

Measures of success

- 4.1 Provide residents' parking places throughout the area that help residents to park closer to their homes during the day.
- 4.2 Engaging with the local community to produce a scheme that will reflect the views of the majority of residents who responded to the consultation.

Financial impact

- 5.1 The cost of preparatory work for the introduction of the Priority Parking scheme, including the design of the scheme and advertising the TRO, will be met from within existing Parking Operations budgets.
- 5.2 The cost of implementing the Priority Parking controls has been estimated at approximately £20,000.
- 5.3 The intended approach to introduce Priority Parking would follow a similar process to previous schemes; to introduce parking places in phases, making use of existing street furniture and seeking permission for signs to be erected on walls or fences to minimise costs where applicable.
- 5.4 The elected members have indicated that they would like residents to be issued with free parking permits in year 1, with charges only being introduced in year 2, after the completion of a review of the scheme.

Risk, policy, compliance and governance impact

- 6.1 It is considered that there are no known risk, policy, compliance or governance impacts arising from this report.

Equalities impact

- 7.1 Consideration has been given to the Council's Public Sector Duty in respect of the Equalities Act 2010 and there are no direct equalities impacts arising from this report.
- 7.2 The main aim of Priority Parking is to manage the various demands on the limited kerbside space available in residential areas and to help residents park closer to their homes. It is expected that this will have a positive impact on the Council's duty regarding the protected characteristics of age and disability.
- 7.3 The necessary legal process for the introduction of the proposals include full public consultation in addition to a number of statutory bodies, including residents' groups, the emergency services, business representatives and public transport operators.

Sustainability impact

- 8.1 The impacts of this report in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties have been considered and the outcomes are summarised below:
- The proposals in this report are not expected to impact on carbon emissions;
 - The proposals in this report are not expected to impact on the city's resilience to climate change impacts; and
 - The proposals in this report are not expected to impact on social justice, economic wellbeing or the city's environmental good stewardship.
- 8.2 It is possible that the proposals may have a beneficial impact on reducing carbon emissions by helping residents park closer to their homes and decrease their search when driving around looking for a parking space. It may also help encourage commuters to use alternative more-environmentally friendly forms of transport.

Consultation and engagement

- 9.1 Consultation took place with local elected members, and the Community Council that led to a public meeting attended by approximately 100 people (including elected members and Council Officials). A further informal consultation took place supported by the Community Council which resulted in a 156 responses being received.
- 9.2 There was a good response to the informal consultation and as a result it is recommended to begin the necessary TRO process for the introduction of Priority Parking in Telford. There will be a further opportunity for residents to comment on, or object to, the draft proposals as part of that process.

Background reading/external references

None.

John Bury

Acting Director of Services for Communities

Contact: Gavin Sherriff, Traffic Orders and Project Development Assistant

E-mail: gavin.sherriff@edinburgh.gov.uk | Tel: 0131 469 3309

Links

Coalition pledges	Maintaining and enhancing the quality of life in Edinburgh.
Council outcomes	CO22 – Moving efficiently – Edinburgh has a transport system that improves connectivity and is green, healthy and accessible. CO23 – Well engaged and well informed – Communities and individuals are empowered and supported to improve local outcomes and foster a sense of community. CO24 - The Council communicates effectively internally and externally and has an excellent reputation for customer care. CO26 – The Council engages with stakeholders and works in partnership to improve services and deliver on agreed objectives.
Single Outcome Agreement	SO4 – Edinburgh’s communities are safer and have improved physical and social fabric.
Appendices	Appendix One: Informal Consultation Responses. Appendix Two: Standard Letter.

Appendix One: Informal Consultation Responses

1. The 147 standard letters received indicate that respondents support the introduction of Priority Parking in the Telford area. However they did not include any further comments on parking for consideration.
2. The remaining nine responses produced 28 separate comments regarding the proposals or other issues, which were a cause for concern for residents. These are categorised into eight general themes; footways, hospital, driveways, access, verges, displacement, road safety and miscellaneous.
3. The main issue that residents raised concerns about was the inconsiderate parking on the footway in Telford Road. Five people suggested that parking in such a manner is becoming more and more commonplace, as vehicles parked on the footway are not only dangerous for pedestrians attempting to cross the road but they are damaging the pavement.
4. The second theme regarded problems that were attributed to the Western General Hospital. Four residents considered that commuter parking problems were created by hospital staff and one said the removal of their on-site parking had resulted in them parking in residential streets. Another resident thought the Council should be doing more to understand and address the needs of hospital staff, to resolve their issues. NHS Lothian has a Travel and Transport Manager who is responsible for such matters.
5. Three residents said that they had a driveway so the proposals would not affect them; this includes one of the two people who opposed the introduction of the scheme.
6. The fourth issue relates to the impact of inconsiderate parking on access around the estate. It is suggested that inconsiderate parking on corners or adjacent to driveways prevents deliveries and residents using their vehicles. Furthermore, there were fears that it causes problems for emergency service vehicles in the event of an emergency. One resident suggested that all corners in the area need to be treated with double yellow lines, whilst another requested that current restrictions be refreshed.
7. The fifth topic regards the grass verges around the estate. A parking ban on grass verges was requested as residents pay a factor for the maintenance of these areas. Plus it was suggested that parking in this manner brings mud onto the road, which results in drains becoming blocked and streets flooding.

8. Two people have suggested that introducing Priority Parking will displace parking pressures into other areas, such as Drylaw. The aim of Priority Parking is to help residents park closer to their homes, without moving parking problems to other areas. By introducing residents' parking places and in phases, to meet the number of residents who support the scheme and want to buy permits, the risk of moving problems elsewhere is minimised.
9. There were a number of road safety issues, which included:
 - a suggestion to move the safety camera on Telford Road closer to the Western General, as vehicles trigger the vehicle activated speed sign;
 - a resident calling for a pedestrian crossing on Telford Road;
 - a request to reduce the speed limit throughout the Telford area; and
 - a resident concerned that with many children making their way to and from school through the area, accidents urgently need to be prevented.
10. The final miscellaneous category includes points which were raised once but do not fall within a previous theme. The first suggested that the Council needs to sell the scheme more effectively to residents, by breaking down the annual permit price into a weekly fee. Secondly, it was requested the scheme be introduced as a pilot with parking permits being issued free of charge in the first year. There was a concern that too many gardens were being changed into driveways, which is detrimental to the environment. Security concerns about leaving the car out of sight in the evenings were also included. It was claimed many residents had two or more vehicles on the road which created parking problems. One person said they never had any issues parking in the area.
11. These concerns will be taken into consideration during the design phase of the Priority Parking scheme and where necessary issues will be discussed with other Council teams.

DRYLAW TELFORD COMMUNITY COUNCIL

TELFORD PARKING SUB-GROUP

Priority Parking Scheme Consultation Letter

Dear Telford Resident,

The City of Edinburgh Council (Parking Operations) carried out a consultation in March 2013 on the possibility of introducing a Priority Parking scheme in your area and the result of it was inconclusive.

With further representation from residents in the Telford area Drylaw Telford Community Council held a public meeting, attended by your local Councillors and Council officials, in the Telford Arms on 31 March 2014. Those attending that meeting broadly indicated their support for Priority Parking. On that basis of support it was decided to ask for a new consultation in order to offer residents another opportunity to give us their views.

You will have or soon receive a second consultation letter from the City of Edinburgh Council on the possibility of introducing a Priority Parking Scheme in your area.

Drylaw Telford Community Council supports the merit of the Priority Parking Scheme as a means to solve the large commuter parking within Telford and urges all residents to respond to this consultation letter.

So please respond by the 27th June 2014. Failure to do so it will be unlikely the City of Edinburgh Council would consider parking controls in Telford area again for another five years.

Alex Dale,
Chair, Drylaw Telford Community Council.

I of

agree to support the Priority Parking Scheme for the Telford Area

Signature

Date

Transport and Environment Committee

10.00am, Tuesday, 26 August 2014

Response to the Consultation on the Draft Traffic Signs Regulations and General Direction 2015

Item number	8.5
Report number	
Executive/routine	
Wards	All

Executive summary

This report sets out a response, to the UK Department for Transport covering proposed changes, set out in a Consultation on the draft Traffic Signs Regulations and General Direction 2015.

The changes are broadly welcome. They increase the freedom of the Council, to tailor consultation on yellow lines and several other matters, currently covered by detailed statutory guidance, to suit specific projects. They have potential to reduce sign clutter and at the same time allow more freedom in several aspects of sign design. This will help the Council in a number of areas, for example in producing clear parking signs and in progressing cycling projects.

Links

Coalition pledges	P19
Council outcomes	CO22
Single Outcome Agreement	SO4

Response to the Consultation on the Draft Traffic Signs Regulations and General Direction 2015

Recommendations

- 1.1 It is recommended that the Committee approves the response, to the consultation on the draft Traffic Signs Regulations and General Directions 2015, which was submitted on the 12 June 2014.

Background

- 2.1 The Department for Transport (DfT) has carried out a comprehensive review, of the Traffic Signs Regulations and General Directions (TSRGD). Following the review, the DfT has consulted on proposed changes to the TSRGD and a revised document, the 'New TSRGD'.

Main report

- 3.1 The New TSRGD is completely restructured, to provide more flexibility and a much greater range of sign designs. This will substantially cut the need for the DfT to authorise signs on a case by case basis. It will offer significant savings in time and costs. A summary of these changes can be found in Appendix 1.
- 3.2 The consultation, which closed on 12 June 2014, posed a number of questions to stakeholders on the proposed changes to the TSRGD. In summary, the response submitted (Appendix 2) was very supportive of the changes.
- 3.3 The New TSRGD allows more discretion in placing signs, in many cases removing the requirement for upright signs and markings to be placed together. For example, if parking bays are clearly marked on the road, along with any relevant times and restrictions, no signs will be needed. Taking account of improvements in reflective materials, it significantly relaxes requirements for lighting signs, with resulting potential for savings in installation and energy costs. The main changes in the TSRGD are summarised in Appendix 2.
- 3.4 It is worth noting that, on the whole, the appearance of signs themselves will not change. The consultation was about creating a more flexible legislative framework for signing, rather than new signs.

- 3.5 The deadline for responses was 12 June 2014. With this in mind a draft response has already been submitted. Should Committee wish to amend the response, a revised version can be sent.

Measures of success

- 4.1 The reduction in signage requirements and required size of signs should improve the streetscape of the city.
- 4.2 The removal of requirements for lighting of signage will, in the future, reduce the energy costs associated with lighting.
- 4.3 The greater flexibility in signage requirements will help significantly in introducing cycling measures, such as contraflows in one-way streets.

Financial impact

- 5.1 The reduction in overall requirement for signing, in required sign sizes and the need for lighting, will all reduce both capital and revenue costs for the Council.

Risk, policy, compliance and governance impact

- 6.1 There are not expected to be any negative health and safety, governance, compliance or regulatory implications, arising from the proposals set out in the report.

Equalities impact

- 7.1 The proposed changes to the TSRGD will, in general, increase the ability of the Council, to sign appropriately to local circumstances and needs. Any equalities impacts will not be a direct consequence of the New TSRGD. The impact of new ways of signing, which are enabled by this new document will need to be assessed, as part of the projects concerned.

Sustainability impact

- 8.1 The reduction in overall requirement for signing, in required sign sizes, and the need for lighting will all reduce environmental impacts.

Consultation and engagement

- 9.1 The Council has been consulted as part of a nationwide consultation, undertaken by the Department for Transport. No further consultation has been carried out by the Council.

Background reading/external references

None.

John Bury

Acting Director of Services for Communities

Contact: Allan Hutcheon, Active Travel Officer

E-mail: allan.hutcheon@edinburgh.gov.uk | Tel: 0131 469 3672

Links

Coalition pledges	P44 – Prioritise keeping our streets clean and attractive.
Council outcomes	CO18 – Green – We reduce the local environmental impact of our consumption and production. CO19 – Attractive Places and Well Maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and delivery of high standards and maintenance of infrastructure and public realm.
Single Outcome Agreement	S04 – Edinburgh’s communities are safer and have improved physical and social fabric.
Appendices	1 Consultation Response. 2 Main changes to TSRGD summarised.

Appendix 1 – Proposed changes to the TSRGD 2015.

Main aims of the consultation

- Consolidate all amendments introduced since 2002.
- The document is more flexible in the range of signs available, by using a building block system with each section (eg Regulatory, Directional) having its own set of tables.
- Signing the Way fully incorporated and available to Scotland and Wales without any authorisation required
 - 20mph Zones and limits
 - Signing/Marking Bays
 - Ped Countdowns
 - Bus Lane signs – add authorised vehicles
 - Trixi mirrors

Main changes to sign illumination requirements

Remove lighting requirements for

- Warning Signs
- Regulatory Cycle Signs
- Bus Gate/tramway
- Self righting Bollards
- 20mph (Regulatory Signs)

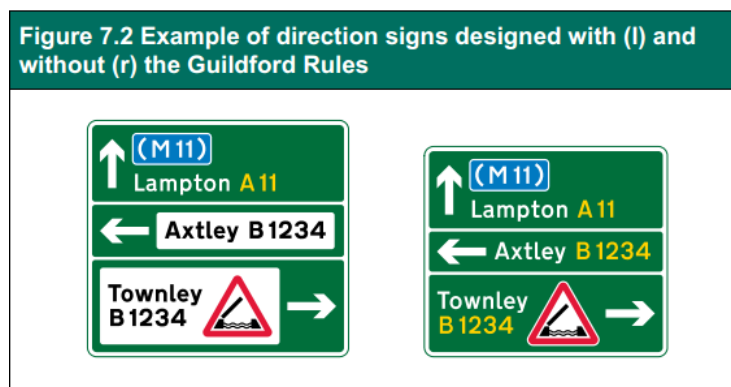
Illumination is still required lights for Give Way/No Entry/Height Restriction Signs and banned manoeuvre (outwith 20mph zones/limits).

Main changes to reducing sign clutter

Remove the need for having signs and markings (eg Parking Bays or 20mph signs and roundels).

Reducing the size of directional signs by the removal of Guildford Rules.

- These were introduced in 1994 and use colour-coding 'panels' to show the route hierarchy system, on advanced direction signs.
- The proposal is to revert to colour coding only the route number for higher status routes and not the destination.
- An example of signs designed with and without the Guildford rules is shown below



- Remove inset boxes from signs, unless high category route
- Remove change in width of lanes shown on sign.

Onus on council to determine the appropriate level of signing provision by using Traffic Signs Manual Chapter 3.

- Reduce number of existing terminal signs.
- Reduce number of speed limit signs.
- Option to use diag 1065 (Roundels) instead of repeater signs.
- Roundels can be placed without additional signage.

Remove the requirement to install traffic calming features at specified intervals.

- Minimum 1 feature within 100m.

Signs do not need to be lit in 20mph zones but must be reflectorised.

Main changes to parking & waiting restrictions

Consider removing Traffic Orders requirements from

- Single/Double Yellow lines
- Keep Clear Zigzags

These would work in the same way as Bus Stop Clearway and Yellow boxes are currently run. Expect LA to consult effectively.

Increase flexibility and understanding of parking signs.

Allow a building block theme to be used to allow LA to install signage relevant to the area, reducing the need for authorisation.

Flexible size/appearance of parking bays. No requirement to use dashed lines (can be by use of alternative materials, solid lines).

Measures to improve cycling facilities

Measures currently authorised that will be prescribed;

- Cycle safety mirrors, known as 'Trixi' mirrors
- No Entry Except Cycles' signing
- Cycle filter signals
- Use of a red cycle aspect on cycle-only traffic lights
- Cycle route branding - for example, wider national use of Transport for London's Cycle Superhighways branding and the new 'Quietways' signing
- 7.5m deep Advanced Stop Lines (ASLs), to provide more capacity for cyclists
- New road markings to help indicate cycle routes through junctions
- Wider cycle lane markings
- The use of the square white 'elephant's footprints' markings to indicate the route for cyclists through a traffic signal controlled junction
- Greater flexibility in designing 20mph zones and limits
- Advanced Stop Lines covering only part of the width of the road - for example, across one lane only

New measures that will be prescribed;

- The removal of the requirement for a lead-in lane or gate at ASLs. This will permit cyclists to cross the first stop line at any point, allowing them to position themselves where they feel it is most appropriate. This applies to ASLs at crossings, as well as at junctions
- Removing the requirement for signs indicating off-road cycle routes to be lit
- Allowing smaller signs for off-road cycle routes (these proposals are not included within the draft Schedules but will be in the final version)
- Allowing zig-zag markings at pedestrian crossings to be offset from the kerb, by up to 2m, to allow cycle lanes to continue through the controlled area
- Where pedestrian zone signs include the "no motor vehicles" sign, the zone will now be referred to as a "pedestrian and cycle zone". This will help the public's understanding of the difference between the "no vehicles" and "no motor vehicles" signs

No Traffic Order required for cycle facilities;

- Contraflow cycle lanes
- Mandatory Cycle Lanes

These would still be expected to be consulted with public prior to installation.

New Shared ped/cycle crossing. (Zebra Crossing with cycle crossing alongside.)

Low level signals. (Linked with existing Traffic signal)

- They are trialling a form of head start signals with Manchester which have been positive.

Planning to trial Cycle streets which would include a ban on overtaking on lightly trafficked streets where cycle flows are high, potentially with an advisory 15mph speed limit.

Main changes to Traffic Signals and Pedestrian crossings

Incorporate the Zebra, Pelican and Puffin Crossings Regulations and General Directions 1997 (the ZPP Regulations) to provide consistency and allow the DfT to update the requirements of the ZPP regulations, where needed. The layouts and operation of crossings will not change and zig-zag controlled areas will remain a requirement.

However, the requirements for zig-zag layouts at crossings will be simplified where possible. Much of the requirements of Schedules 1 and 4 of the ZPP regulations will be moved to guidance, to provide more flexibility in designing crossing layouts.

Removal of option to install Pelican crossings, this will not effect any currently installed until the equipment reaches the end of its life.

Authorities that want to retain the farside signals but provide the benefits of puffin crossings, can also use what is known in London as a 'pedex' crossing.

- These crossings use the familiar farside signals of a pelican but do not have the flashing green man or flashing amber.
- They can be used with similar detectors to puffins and the new countdown signals (included in the new TSRGD) developed to show how much time is left to cross the road, during the blackout period.

Other main changes to signage

New Boundary Signs with Photographic Images.

Changing current blue positive Bus Only signs with no entry signs with sub sign stating what is allowed.

Yellow boxes – Less prescribed, no authorisation required for unusual shapes.

Traffic enforcement signs – Bus Lane Camera signs.

Appendix 2: TSRGD Consultation Response as sent

- 1 *If you are responding as a traffic signs practitioner, from the draft you have seen in this consultation, do you believe the new structure and provisions of TSRGD will give you the flexibility to design and use the signs you need to help manage traffic?*

Strongly Agree	
Agree	✓
Neither Agree nor Disagree	
Disagree	
Strongly disagree	

From the draft we have seen we believe that the new structure and provisions will assist the City of Edinburgh Council in reducing clutter as well as the size and number of signs we place on the street network.

The layout of the schedules has made it clearer and much easier to understand the TSRGD.

- 2 a) *We would like your views on extending deregulation of sign lighting. The proposal is that any signs within 20 mph limits and zones would no longer need to be lit. This is on the basis that at slower speeds there is more time available to drivers to read the signs.*

Do you agree that all signs within a 20 mph limit/zone, particularly safety critical signing such as "no entry" signing, should be subject to local authority judgment only?

Strongly Agree	✓
Agree	
Neither Agree nor Disagree	
Disagree	
Strongly disagree	

We agree that all signs within 20 mph limits and zones should be subject to local authority judgement. There may be very specific local circumstances to justify lighting, this type of decision is best taken locally.

- b) *Do you agree that the requirement to light 'two-way traffic ahead' signs is safety-critical, and should remain, or should be removed in line with other warning signs?*

Strongly Agree	
Agree	
Neither Agree nor Disagree	✓
Disagree	
Strongly disagree	

The wording of the question makes responding difficult. We consider that it would make sense to remove the requirement for lighting for these along with other signs. We do not feel that they are any more safety critical than such signs as no entry and height limits.

- c) *To help inform our final Impact Assessment please can you provide us with estimates within your local authority on,*

- 1.1 i. *The number of illuminated traffic signs you have placed in 20 mph zones?*

0-50	51-100	101-200	201-500	501+
✓				

- ii *The number of traffic signs you have placed on retroreflective self righting bollards?*

0-50	51-100	101-200	201-500	501+
	✓			

- iii *On average what is your estimated yearly energy cost of lighting a single traffic sign?*

The average estimated yearly energy cost is approximately £15 for a single traffic sign.

- 3 a) *Is there anything more we can do within TSRGD to reduce sign clutter?*

Yes	No
✓	

- b) *If you are responding as a traffic signs practitioner, will you take advantage of the greater flexibility within the new TSRGD to reduce sign clutter?*

Yes	No
✓	

We see this as a positive for Edinburgh, especially in relation to the World Heritage Site. It will give us the opportunity to reduce the sign clutter throughout the area and help achieve our urban design objectives while not compromising safety.

- 4 a) *Do you support the proposals to allow changes to yellow line restrictions to be made without an associated Traffic Order (TO) process?*

Yes	No
✓	

This would streamline the requirements on the TO process, and can help undertake minor changes without the long drawn out process to make the changes.

- b) *As a local authority, would you ensure that effective consultation would be undertaken if the requirement for a TO is removed?*

Yes	No
✓	

The opportunity to tailor consultation on waiting and loading restrictions according to local circumstances is welcome. It promises to save time and money and enable us to deliver a better service to the public. Consultation is very important to this Council. However the current requirements are overly rigid and the proposals would enable us to carry out an appropriate level of consultation depending on the extent and nature of proposals.

5 To inform our final Impact Assessment please can you provide us with estimates within your local authority on the number of cycle schemes you have introduced over the last 10 years using the following signs?

a. Except cycles' plate when it is placed directly beneath the following signs that already have an associated Traffic Order.



0-200	201-500	501-1000	1001-2000	2001+
✓				

The number of this style of sign has been limited due to the current requirements to seek authorisation.

b. Width-flow cycle lane and one way traffic with contra-flow cycle lane sign, along with the white lane marking:



0-200	201-500	501-1000	1001-2000	2001+
✓				



0-200	201-500	501-1000	1001-2000	2001+
✓				

The number of this style of sign has been limited due to the current requirements to seek authorisation and the staff time required involved in processing the Traffic Orders.

- 6 a. Do you agree that pelican crossings should not be included in TSRGD?

Yes	No
✓	

Edinburgh current policy is to replace any existing Pelican crossing when they reach the shelf life with the puffin style crossing. This will continue as per the new regulations as standard unless it would be appropriate to install the Pedex style dependent on local needs/requirements.

- a. If No, should they be allowed for:

- Multi-lane approaches?

Yes	No

- For any site?

Yes	No

- 7 If you are responding on behalf of a local authority, are you likely to make use of the flexibility within the new TSRGD to put up:

- a. Signs indicating the present county boundaries?

Yes	No
✓	

These are currently already in use and we are likely to continue to use them.

- b. Signs indicating historic county boundaries?

Yes	No
	N/A

c. *Signs indicating designated geographical areas?*

Yes	No
✓	

These are currently already in use and we are likely to continue to use them.

d. *Photographic boundary signs?*

Yes	No
✓	

While there are no plans at current to use this style of sign it may be something that could be used in the future.

8 *Do you support the proposal to include new definition of tourist destination for England within TSRGD?*

Yes	No
NA	

9 *Do you support the proposal to remove the Guildford rules from sign design?*

Yes	No
✓	

We welcome the changes to allow the signs to be simplified and reduce the size and impact of signs within the urban environment.

10 *Do you support the proposal to expand the use of exceptions to 'no entry' signs?*

Yes	No
✓	

We very much welcome this proposal and have been advocating it for some time, especially in relation to cycles. There are a number of residential streets in the city where one way use for motor vehicles makes sense but there is no need for such a restriction on cyclists. In these cases the 'no entry except cycles' sign combination is by far the clearest available.

- 11 *In your view, would a sub-plate on these signs be helpful in understanding these prohibitions?*

Yes	No
✓	

On balance we feel it may be useful to allow use of the sub plates. If they are to be used in relation the cycling, they should state 'No Cycling' rather than 'No Cyclists'.

- 12 *In your view, are revised signs indicating the presence of enforcement cameras necessary, or is the proposal to deal with this through the existing planning regime sufficient?*

Yes	No
	✓

We do not support these revised signs as they would increase sign clutter and in our view serve no useful purpose.

- 13 *Do you have any other comments on the draft Schedules?*

Yes	No
✓	

Subject to detailed comments made above, in general we strongly welcome the proposed changes. They offer the potential for a significant streamlining of processes, for a reduction in street clutter, and for easier implementation in policies relating to cycling. As a consequence they should enable an improved level of service to the public.

Edinburgh along with a number of other local authorities is moving towards a street network where potentially up to 80% of streets would be 20mph. Where there is an adequate system of lighting and the default speed limit is to be changed to 20mph it would be helpful if there was a similar rule in place such as Direction 11 of TSRGD paragraph (4) regarding '30mph speed limits in built-up areas' where a system of carriageway lighting is provided repeater signs shall not be placed (repeater signs are prohibited) until a point where the speed limit ends.

We urge that consideration be given to introducing this rule to allow 20mph speed limits by installing 'gateways' at the start of the change in speed limit and removing the requirement to install repeater signs to reduce the number of signs required. This would result in a considerable reduction in costs and street clutter to the local authority.