

# Noise Management Plan

## Street Sweeping and Leaf Blowing



Prepared by City of Melville

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Version	Description	Date	Author	Reviewer	Approver
0	Draft Internal Review	28/10/2021	CS	SM	
1	Manager Approval	10/11/21	SM	JB	
2	Final Release		JB	MT	

# 1 Introduction

The City of Melville (the City) provides essential streetscape maintenance services including road and car park sweeping and leaf blowing activities within the precincts shown in Figure 4-1. These services are classified as Class 2 works in accordance with Regulation 14A of the Environmental Protection (Noise) Regulations 1997 (Regulations). This Noise Management Plan (NMP) provides the framework by which the City will manage their noise impacts from Class 2 works on the surrounding communities.

## 1.1 Aim

The aim of the NMP is to minimise the impact of Class 2 works; street sweeping and leaf blowing noise emissions within the precincts of the City between 5am and 7am.

## 1.2 Scope

Regulation 14A of the Regulations provides guidance and specific requirements that must be undertaken by the City to minimise their noise impacts from Class 2 works. As a result, the scope of this NMP includes the following:

- Overview of legislation.
- A description of the works to be carried out and justification for the requirement of Class 2 works.
- Details of vehicles and equipment.
- Vehicle and equipment purchase policies.
- Noise mitigation strategies.
- Operator training programmes.
- Community information on the works that will be carried out.
- A complaints response procedure.
- NMP review frequency.

## 1.3 Relevant Documentation

[1] - Environmental Protection (Noise) Regulations 1997

[2] – Draft Guide to management of noise from waste collection and other works

[3] – Complaints Management Policy OP-039

[4] – City of Melville Complaints management Procedure

## 2 Legislation

Environmental noise in Western Australia is governed by the Environmental Protection Act 1986 and regulated through the Environmental Protection (Noise) Regulations 1997 [1]. The Regulation's includes considerations for management of essential services such as waste collection, cleaning of public places and hazard management.

Noise<sup>1</sup> emitted from street sweeping and leaf blowing is exempt from the assigned levels in the Regulations provided the provider has an approved NMP and operates in accordance with the requirements in Regulation 14A and 14B. Once the NMP has been approved by the delegate chief executive officer (CEO)<sup>2</sup>, the NMP will be valid for three years after the day of commencement of approval and will be reviewed on an annual basis for its duration.

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<sup>1</sup> Note: Some types of noise emissions are exempt from compliance, and these are listed in regulation 3 which include noise emissions from the propulsion and braking systems of motor vehicles operating on a road.

<sup>2</sup> i.e. CEO of the Department of Environment Regulation (DER CEO), or the CEO of the local government (LG CEO).

## 3 Operations

### 3.1 Overview

The City of Melville Engineering and Parks Operations Departments has two main essential business units: City Works and City Parks. Sections 3.2 to 3.4 describe the operations undertaken by each business unit and Table 3-1 provides a list of equipment used by each unit.

**Table 3-1 : Business Unit Vehicle Details**

Business Unit	Fleet /Plant Detail	Brand and Type	dB(A) Rating	Purchase Year	Number of Fleet/Plant
City Works	Road Sweeper	Rosmech Regen R6, on a Hino FG1628.	89dB(A)	2021	32221
		Johnstone RT655, on a Hino	108dB(A)	2015	32615
		Johnstone RT655, on a Isuzu	108dB(A)	2012	32212
City Parks	Leaf Blower	Stihl BGA100 (battery)	90dB(A)	2020	2

### 3.2 Street Sweeping

The City carries out regular maintenance to roads and streetscapes according to a planned schedule, as well as responding to reports of any hazards.

The City's level of service for street sweeping is to achieve a minimum of 4 sweeps annually of all City roads. This equates to once every 3 months and is subject to a number of factors, i.e. weather conditions, mechanical maintenance and breakdowns and operator illness, etc. The street sweeping program runs on an eight week cycle and assists in removing dirt and debris from the road edges.

Street sweeping takes place within the City's key activity centres each week on Thursday and Friday between 5:15am and 6am.

### 3.3 Leaf Blowing

Leaf blowing comprises the distribution of sand and leaf debris from footpaths on to road through the use of battery operated leaf blowers. Leaf blowing takes place within the City's key activity centres on Thursday and Friday each week between 5am and 6am.

## 4 Justification for out-of-hours (Class 2) works

The City proposes to change the starting time of street sweeping and leaf blowing from 7am to 5am on Thursday and Friday. Starting earlier will allow the City to service a number of key activity centres as well as primary and secondary distributor roads (as shown in Figure 4-1) before cafes and restaurants open for business and roads and car parking bays become too congested with traffic.

Undertaking works during periods where cafes and restaurants are open for alfresco dining and where there is high traffic congestion increases the safety risk for all café and restaurant customers and road users as well as reducing the flow of traffic. Within the key activity centres parked vehicles can also block access for road sweeping. Commencing works at 5:00am reduces the risks associated with a 07:00am start. Additionally, street sweeping and leaf blowing is far more effective, efficient, and safe manner within the specified precincts between 5:00am and 7:00am.

The key activity centres, primary and secondary distributor roads are as follows:

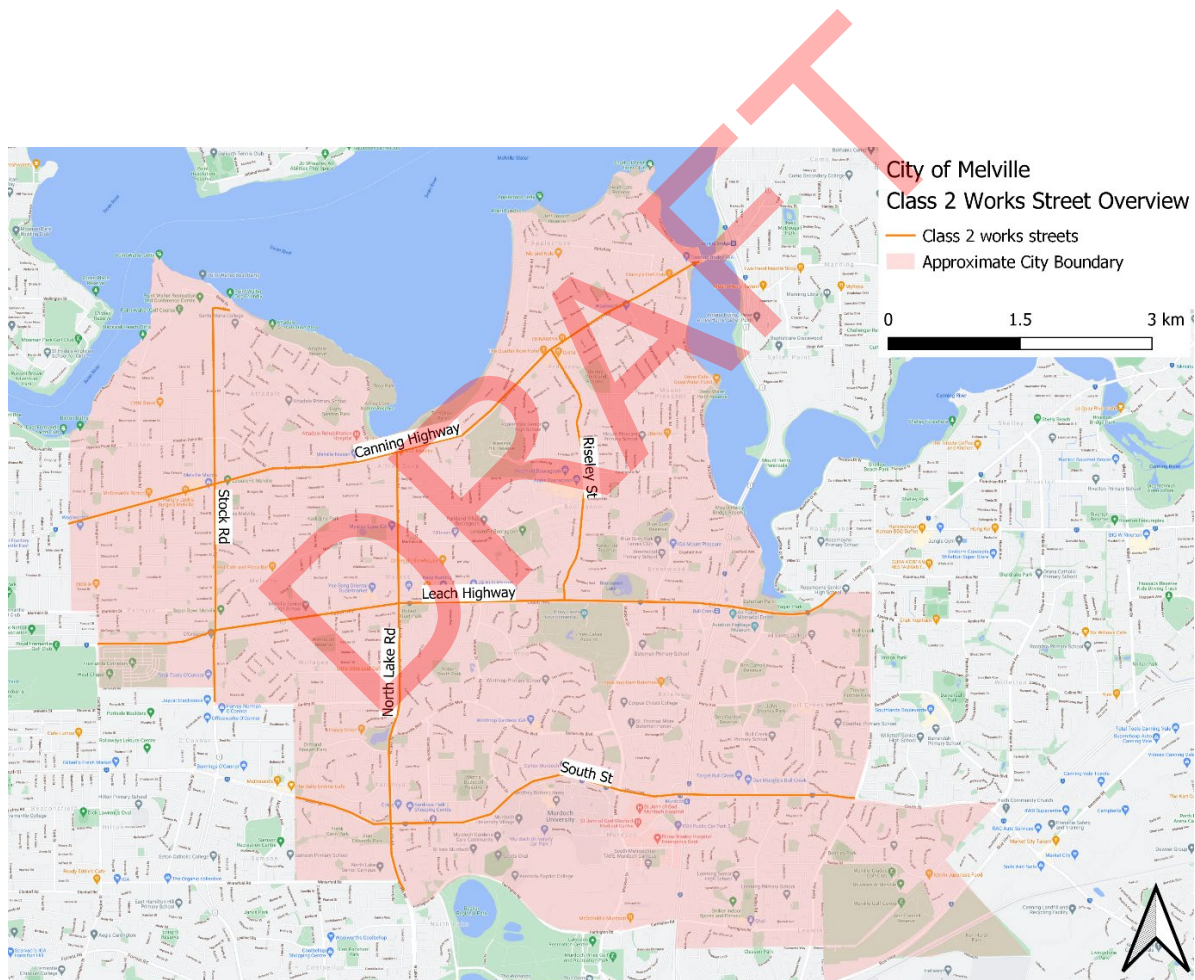
- Applecross Village
- Riseley Precinct
- Civic Centre
- Fiona Stanley Hospital Precinct.
- Local distributor roads.

Road Name	Start point	End Point
Marmion Street	Petra Street	Riseley Road
Riseley Road	Leach Highway	Canning Highway
Carrington Street	Leach Highway	Marmion Street
Stock Road	Leach Highway	Canning Highway
North Lake Road	Winterfold Road	Canning Highway
Murdoch Drive	Farrington Road	Leach Highway
Karel Avenue	Dimond Court	Keith Street
Moolyteen Road	Leach Highway	Cranford Avenue
Carrington Street	Marmion Street	Canning Highway
Preston Point Road	Petra Street	Canning Highway
Somerville Boulevard	North Lake Road	Murdoch Drive
Parry Avenue	Murdoch Drive	Karel Avenue
Cranford Avenue	Moolyteen Road	Kwinana Freeway
Moolyteen Road	Cranford Avenue	Canning Avenue
Reynolds Road	Canning Avenue	Canning Highway
Kintail Road	Ardross Street	Canning Highway
Petra Street	Marmion Street	Preston Point Road
Elvira Street	Petra Street	Stock Road
McKimmie Road	Marmion Street	Canning Highway
Point Walter Road	Canning Highway	Kent Street
Honour Road	Kent Street	Carroll Drive
Carroll Drive	Honour Road	Burke Drive
Burke Drive	Carroll Drive	Lentona Road
Lentona Road	Burke Drive	Canning Highway
Stock Road	Preston Point Road	Burke Drive
Clive Street	Stock Road	Moreing Road
Wichman Road	Moreing Road	Hislop Road
Hislop Road	Canning Highway	Canning Highway

Road Name	Start point	End Point
Kitchener Road	Stock Road	Norma Road
Williams Road	Marmion Street	Canning Highway
Potts Road	Leach Highway	Marmion Street
Rome Road	Leach Highway	Canning Highway
Norma Road	Leach Highway	Canning Highway
Davy Street	North Lake Road	Marmion Street
Marcus Avenue	Leach Highway	Marmion Street
Karoonda Road	Riseley Road	Canning Avenue
Canning Avenue	Karoonda Road	The Esplanade
Coomoora Road	Riseley Road	Reynolds Road
Cranford Avenue	Kwinana Freeway	The Esplanade
The Esplanade	Cranford Avenue	Canning Highway
Coogee Road	The Esplanade	Wilcock Street
Simpson Street	Wilcock Street	Canning Highway
Riseley Road	Canning Highway	MacLeod Road
Dunkley Avenue	Canning Highway	Cunningham Street
Melville Beach Road	Cunningham Street	Dee Road
Dee Road	Melville Beach Road	MacLeod Road
MacLeod Road	Riseley Road	Ardross Street
Ardross Street	Canning Highway	Fraser Road
Canning Beach Road	Kintail Road	Duncraig Road
Garling Street	Stock Road	North Lake Road
Boon Street	Stock Road	Lucas Street
Hodge Street	Lucas Street	Bawden Street
Bawden Street	Hodge Street	Harfoot Street
Harfoot Street	Bawden Street	Archibald Street
Archibald Street	Harfoot Street	North Lake Road
Winnacott Road	Archibald Street	Leach Highway
Winthrop Drive	Leach Highway	Somerville Boulevard
Aitken Drive	Winthrop Drive	Winthrop Drive
Jackson Avenue	Winthrop Drive	Somerville Boulevard
Ten Seldam Court	Jackson Avenue	Jackson Avenue
Le Souef Drive	North Lake Road	North Lake Road
Pettersen Avenue	South Street	City Boundary
Anglesey Drive	Winterfold Road	Winterfold Road
Gilbertson Road	Farrington Road	Crossland Way
Kirk Road	Crossland Way	Somerville Boulevard
Prescott Drive	South Street	Somerville Boulevard
Gratwick Terrace	Prescott Drive	Johansen Promenade
Johansen Promenade	Somerville Boulevard	Somerville Boulevard
Marsengo Road	Murdoch Drive	Parry Avenue
Dean Road	Parry Avenue	Gannett Street
Gannett Street	Dean Road	Electra Street
Electra Street	Gannett Street	Leach Highway
Bullcreek Drive	Parry Avenue	Leach Highway
Camm Avenue	Bullcreek Drive	Parry Avenue
Ewing Avenue	Camm Avenue	Camm Avenue
Brockman Avenue	Ewing Avenue	Karel Avenue
Benningfield Road	South Street	Parry Avenue
Wheatley Drive	South Street	Parry Avenue



Road Name	Start point	End Point
Calley Drive	South Street	Aulberry Parade
Aulberry Parade	Farrington Road	Findlay Road
Findlay Road	Farrington Road	South Street
Gladstone Road	Findlay Road	Hartfield Crescent
Hartfield Crescent	Gladstone Road	Karel Avenue
Westmorland Drive	Hartfield Crescent	South Street
Westminster Road	Findlay Road	Karel Avenue
Casserly Drive	Farrington Road	City Boundary
Casserly Drive	Farrington Road	City Boundary
Beasley Road	Karel Avenue	South Street
Gracechurch Crescent	Karel Avenue	South Street
McGuinness Drive	Gracechurch Crescent	Beasley Road



**Figure 4-1 : City of Melville Map incl Routes for Class 2 Works**



## 5 Noise Controls

### 5.1 Low Noise Purchase Policies

The City utilises street sweeping vehicles for a maximum of 8 years before purchasing a new vehicle. New vehicle procurement policies require the City to select vehicles and equipment with noise emissions that are as low as reasonably practicable. The procurement policy will include a maximum allowable noise rating and an evaluation of additional aftermarket noise mitigating options.

### 5.2 Minimising Noise Emissions

The vehicles for street sweeping are mobile and move from location to location, the duration of noise emissions received at a sensitive premise is therefore relatively short and will have a small impact on the assigned noise level LA10 over an assessment period of 1 hour.

Class 2 works will be undertaken as quickly and efficiently as practicable and the strategies in Table 5-1 will be followed.

**Table 5-1: Noise Management Strategies**

Item	Hierarchy of Control	Noise Mitigation
1	Elimination	Where possible, the class 2 works in residential areas will be undertaken as close to 7am as possible to minimise noise impacts on residence.
2		Collection starting points for routes will commence in commercial areas or main roads.
3	Substitution	The use of electric leaf blowers that have a lower dB(A) rating than the petrol alternative. Use vehicles in the fleet that are known to be quieter in sensitive areas and investigate quieter alternatives as part of the fleet replacement programme.
4	Engineering	Regular servicing of vehicles as per manufacturer's recommendations will minimise the risk of components becoming defective which will reduce the risk of any unnecessary noise emissions (e.g. exhaust leaks, bearings etc). All vehicles will be serviced on schedule within required timeframes. Regular servicing allows vehicles to run efficiently which also reduces the risk of increased noise emissions from everyday operation.
5		Defective components identified on vehicles that are reported to supervisors will be mitigated as soon as reasonably practicable to reduce the risk of any unnecessary noise emissions.
6	Administrative	Operators will have the necessary training provided to operate plant and equipment in an efficient manner.
7		Prestart checks and post run checks will completed on a daily basis and vehicles will be checked weekly in a workshop.
8		Reversing will be kept to a minimum to reduce the frequency of a vehicle's reversing alarm sounding.
9		Idling of vehicles will be kept to a minimum.
10		Areas will be scanned for potential hazards and traffic flow will be assessed during collection.
11		Cab windows are closed to reduce the impact of any radio emissions.

Item	Hierarchy of Control	Noise Mitigation
12		Driving training to include techniques to ensure smooth accelerating and braking.
13		Engine revolutions to be kept to a minimum.
14		Engine brakes are not to be used or are manually inactivated

### 5.3 Operator Training Programme

Training is required for all sweeper operators before commencing specified works under this plan. The training will include the following:

- Prestart and post check vehicle inspections.
- Sweeping zones and hot spot locations.
- Smooth accelerating and braking techniques.
- Broom operating techniques.
- Reduced areas of reversing.
- Resident engagement and responding to complaints.

All operators are required to undergo vehicle and equipment training on commencement followed by annual refresher training.

## 6 Complaints and Complaint Response

### 6.1 Community Information

Community information regarding the works carried out under this plan is available to all occupiers of premises in the City via the City of Melville website and can also be provided on request.

The information provided will include:

- A brief description of the works.
- Where the NMP can be accessed.
- A schedule of the works.
- How to lodge comments or complaints about the works.
- The duration of the NMP approval, the date of the next review and how to make a submission.

### 6.2 Receiving a Complaint

Any customer may lodge a complaint. Complaints may be received through any one of the channels made available by the City as per the Complaints Management Policy OP-039.

Where a complaint is received in person or over the phone, the City encourages its customers to provide identification details and as much information as possible in relation to the complaint. This information must be gathered to ensure a thorough understanding of the customer's complaint and the resolution they are seeking.

All complaints are to be treated with confidentiality. Anything discussed during the complaint process must remain confidential unless all parties involved agree otherwise.

### 6.3 Anonymous Complaints

The City understands that some customers may wish to remain anonymous. Whilst anonymous complaints will not be rejected, the customer must be made aware that without identification details the City will be unable to provide any feedback on decisions made or action taken.

### 6.4 Complaints Management Procedure

The purpose of this procedure is to ensure all customer complaints are handled in a consistent, efficient and timely manner. All complaints must be handled using the process and procedures outlined in this document and in accordance with the City's Complaints Management Policy OP-039.

The City's Complaints Management Policy OP-039 details the following steps in the investigation of complaints:

- **Recording a Complaint** - To ensure that all complaints are tracked and actioned appropriately and for auditing purpose and reporting purposes.
- **Acknowledgement of a complaint** - Once a complaint has been received and recorded on Smart Client Pathway, the complainant will receive an acknowledgment from the person who has logged the complaint.

- **Initial assessment of a complaint** - Where the complaint is not managed by the frontline team and resolved during first contact, the Customer Relations Improvement Officer (CRIO) will validate the complaint.
- **Investigation of Complaints** - All complaints relating to noise from specified works will be handled by the City's Environmental Health team.
- **Response to Complaints** - The Environmental Health team will consult with the City Works and City Parks teams in developing a response to a complaint regarding noise from specified works carried out under this plan.

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## 7 Review and Revision

Once this NMP has been approved by the City and the CEO, it will be valid for three years after the day of commencement of approval and will be reviewed on an annual basis for its duration (see section 2). The City's intention is for continuous improvement and will take into consideration all complaints and feedback relating to noise during the period of review.

All reviews will include a review of the noise mitigation strategies, as outlined in this NMP, with the intent of continuously improving the noise performance of the street sweeping and leaf blowing for the benefit of all the City's customers. Any proposed noise mitigation measures are to undergo an As Low As Reasonably Practicable (ALARP) assessment before implementation. The ALARP assessment will consider noise reduction, cost, impact on maintenance, impact on operations and impact on safety.

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