



# NOISE MANAGEMENT PLAN

SHIRE OF CAPEL

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## 1. **B&B STREET SWEEPING**

NOISE MANAGEMENT PLAN for works contracted by the Shire of Capel applicable to Sweeping/Cleaning and Drain Cleaning works in the Shire of Capel boundaries this noise management plan (NMP) has been prepared for the purposes of regulation 14A of the Environmental Protection (Noise) Regulations 1997.

Regulation 14A requires that the following points be addressed for class 2 works.

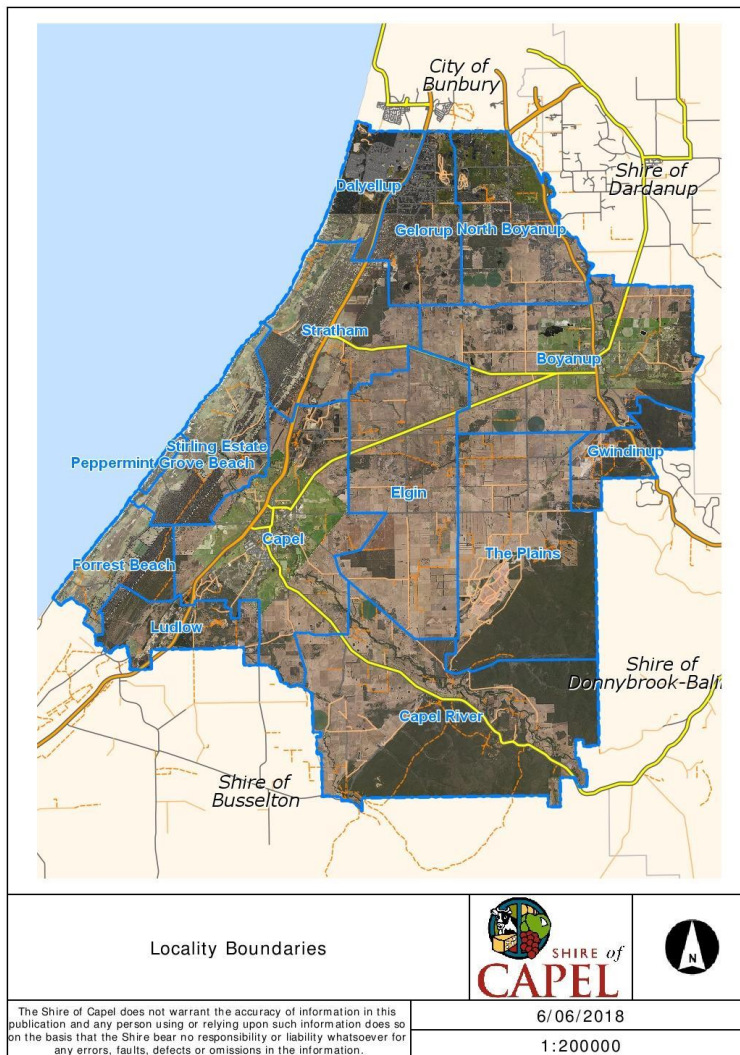
- (a) details of vehicle or equipment evaluation and purchase policies adopted to select, on a reasonable and practicable basis, the quietest vehicle or equipment available; and
- (b) measures to be adopted to minimise noise emissions resulting from carrying out the works; and
- (c) justification for carrying out the works during the times of day to which the class relates; and
- (d) a description of the specified works to be carried out during the times of day to which the class relates; and
- (e) operator training programmes; and
- (f) community information on the manner, in which the specified works will be carried out; and
- (g) a complaints response procedure.

As a point of reference each heading is marked with a letter indicating which of these points it relates to:

2. **SCOPE OF PLAN** (d), (f)

This NMP has been developed to allow essential services to be provided safely, efficiently and with minimal inconvenience to the community.

Area to which Plan applies: All areas within the Shire of Capel boundaries, but only in relation to works carried out under contract with the Shire of Capel.



3. **APPLICATION** (d), (f)

The NMP applies –

- 1) To class 2 specified works as defined in regulation 14A(1), part (A,B&C): Waste Collection Sweeping/Cleaning and Drain Cleaning.
- 2) Only to Waste Collection, sweeping/cleaning and drain cleaning activities conducted by B&B Street Sweeping.
- 3) To Waste Collection, sweeping/cleaning and drain cleaning activities within the Capel Shire boundary between the hours of 4.30am and 7am Monday to Friday and 4.30am to 9am on Sundays. Regulation 7 of the Environmental Protection (Noise) Regulations 1997 does not apply to noise emitted from the specified works if the works are conducted in accordance with the NMP.
- 4) Only to works carried out on behalf of the Shire of Capel.

4. **PURPOSE OF THE NOISE MANAGEMENT PLAN** (f)

1. To minimise the impact of noise associated with waste collection, sweeping, cleaning and drain cleaning within the Shire's boundaries between the hours of 430am and 7.00am Monday to Friday and 430am to 9am on Sundays, while allowing an essential service to be provided safely, efficiently and with minimal inconvenience to the community.
2. Enhance storm water run-off quality by removing debris before parked cars block access. As recommended by the water corporation best practices.

Non-structural controls Best Management Practice Guidelines

**Challenges**

The following challenges may need to be addressed to improve implementation, as reported by Schueler (2000), US EPA (2001) and Taylor and Wong (2002c):

- Determining the optimal sweeping frequency, which is region specific, and needs to draw upon local research (this is the primary limitation). Such frequencies have not yet been determined for Western Australia.
- Determining reliable pollutant removal efficiencies for modern ('high efficiency') street sweepers in a local context (again, additional local research is required in this area).
- Overcoming operational problems that diminish street sweeping performance such as speed, parked cars, and the ability to get access to the kerb'.
- Budgeting for the cost of new technology sweepers.
- Budgeting for the cost of appropriately disposing of highly contaminated waste that may be classed as hazardous and require special disposal arrangements.
- The capability of street sweepers (i.e. their ability to capture a high percentage of fine sediments and associated pollutants), although this limitation is reducing with time.
- Training sweeper operators.
- The inability of sweepers to collect some forms of pollutants (e.g. oils and greases, as well as nutrients in a dissolved form).

Full details available at

[https://www.water.wa.gov.au/data/assets/pdf\\_file/0018/4707/84959.pdf](https://www.water.wa.gov.au/data/assets/pdf_file/0018/4707/84959.pdf)

## 5. **JUSTIFICATION FOR CLASS 2 WORKS** (c)

The class 2 works covered by this plan are required due to access and traffic congestion issues around the sites where Waste Collection, Sweeping/Cleaning and Drain Cleaning activities are being conducted.

B&B Street Sweeping provides services to local government, commercial complexes, construction/ maintenance companies and state government departments.

Worksites in commercial complexes, business districts or close to natural attractions and areas affected by high volume traffic or parked cars require class 2 works for a variety of reasons.

- Areas that are affected by large volumes of traffic or parked cars need to be accessed early to ensure they can be serviced safely and efficiently.
- Some businesses in the area commence trading at 5:30am, which results in increased traffic and vehicle parking in the area. The increase in traffic makes Waste/collection, Sweeping/ Cleaning and Drain Cleaning after 7am more dangerous, as well as hampering the flow of traffic causing significant delays, causing inconvenience and frustration for other road users, frustrated road users are more likely to be involved in an incident.
- Parked vehicles are often found to block access to Kerbs and drains; this problem becomes more significant after 7am as more vehicles descend on the area, making the effective completion of the works after this time difficult.
- Furthermore,
- it is considered best management practice (in relation to storm water quality) to schedule these works for times when cars are not preventing access, by organisations such as Water Corporation WA. The following is extracted from Water Corporations Best Management Practice guidelines. "Ensure street sweeping occurs at a time when vehicles do not block access to the kerb."

6. **VEHICLE AND EQUIPMENT PURCHASE POLICY** (a), (b)  
– Noise management

B&B Street Sweeping considers noise output in the evaluation and purchase of any vehicle or equipment to be used for class 2 works.

B&B Street Sweeping considers the preferential purchase of the quietest equipment on a cost/benefit basis and purchases are made in accordance with a continuous improvement principle regarding noise emissions.

Key points of consideration

- Ensure noise output data is available for consideration for all equipment being considered
- Only plant or equipment with noise emission levels equal to or less than the plant or equipment it is to replace will be considered for purchase unless there are extraordinary circumstances whereby there is substantial and significant benefit (specifically relating to duration of works and exposure to noise) to be gained from the purchase of louder equipment.
- Ensure supplier can provide parts and service in a timely fashion to ensure that the equipment performs efficiently and has a high level of mechanical availability.

## **7. MEASURES TO MINIMISE NOISE EMISSIONS** (b), (f), (e)

Noise minimisation under this NMP is intended to be a process of continuous improvement. The measures listed below do not limit the implementation of additional noise reduction measures. Additional measures will only be introduced where they are not detrimental to any persons receiving noise from the specified works. Measures which propose to shift the noise impact from one receiver to another (or in some other way increase the noise impact – e.g. louder equipment for a shorter duration) will only be considered at the time of preparing a new NMP, at which time public consultation will be required as part the approval process.

### **Procedures**

Sweeping/Cleaning and Drain Cleaning shall where possible start at the furthestmost point from residences, factors affecting this consideration are traffic volumes, pedestrian volumes, parked cars, the effects on traffic movement, the effects on pedestrian safety, impacts on OHS&E and efficiency.

Reverse Alarms are a OH&S requirement, the most noise efficient Alarms will be selected, currently these are the broad band (white noise) type alarms.

B&B Street Sweeping operates fleet that includes a surplus capacity, ensuring that equipment that requiring repairs can be excluded from class 2 works, if repairs cannot be completed within a reasonable time frame.

Leaf Blowers- B&B Street Sweeping has a mixture of battery operated and petrol driven leaf blowers, currently we have 7 battery powered leaf blowers that are being evaluated as a method of reducing overall class 2 noise output.

It's hoped that the battery-operated blowers will be both quieter and that the noise will travel a shorter distance from point of generation.

Please see noise specification below for proposed battery-operated blowers being tested in line with purchasing policy described.






■ **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you loan this tool to someone else, also loan these instructions to them to prevent misuse of the product and possible injury.

**SAVE THESE INSTRUCTIONS!**

**SPECIFICATIONS**

Voltage	56V 
Maximum air volume at nozzle	980m <sup>3</sup> /h
Maximum Air Velocity	65m/s
Approx. Run Time (with EGO 5.0Ah battery)	18min (Boost mode)
	30min (High Speed)
	200min (Low speed)
Maximum blowing force	18N
Blower Weight (without battery pack)	2.18kg
Guaranteed sound power level	68dB(A)

**PACKING LIST**

PART NAME	QUANTITY
Blower	1
Should strap	1
Blower tube	1
Nozzle attachments	2
Operator's manual	1

**DESCRIPTION**

**KNOW YOUR BLOWER (Fig. A)**

1. Spread Nozzle
2. Flat Nozzle
3. Blower Tube
4. Tube-Release Button
5. Base
6. Air Intake
7. Battery-ejection
8. Electric Contacts
9. Latch
10. Battery Release Button

11. Air-speed Trigger
12. Boost Button
13. Speed/Lock-on Dial
14. Shoulder Strap

**EN**

**WARNING:** The safe use of this product requires an understanding of the information on the tool and in this instruction manual as well as knowledge of the project you are attempting. Before use of this product, familiarise yourself with all operating features and safety rules.

**ASSEMBLY**

**WARNING:** If any parts are damaged or missing, do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

**WARNING:** Do not attempt to modify this product or create accessories not recommended for use with this blower. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

**WARNING:** To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the tool when assembling parts.

**APPLICATION**

You may use this product for the purposes listed below:

- Clearing hard surfaces such as driveways and walkways.
- Keeping decks and driveways free from leaves and pine needles.

**NOTICE:** The tool is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse.

**ASSEMBLING/REMOVING THE BLOWER TUBE**

- **To Assemble (Fig. B & C)**  
Align the groove and push the tube onto the blower housing until you hear a "click".
- **To Remove (Fig. D)**  
Press the tube-release button and pull the tube out.

**ASSEMBLING/REMOVING THE BLOWER FLAT/SPREAD NOZZLE**

- **To Assemble (Fig. E & F)**  
Align the groove in the flat nozzle with the tube knob and push the nozzle onto the tube until it snaps into place.

56 VOLT LITHIUM-ION CORDLESS BLOWER — LB5800E

**9**



### **Equipment maintenance**

Vehicles and equipment used for specified class 2 works are to be maintained in good working order with respect to noise emissions as follows:

- (a) Servicing of vehicles and equipment shall be done at the manufacturer's specified intervals and in accordance with the manufacturer's instructions.
- (b) Pre-start checks shall be conducted daily with any issues that may impact noise output to be reported to the supervisor immediately.
- (c) Any faults noted during inspection or any noise increases observed during operations shall be reported to the supervisor as soon as possible and no later than the next working day.
- (d) Repairs shall be affected as soon as possible and no later than seven working days after a fault report is made (subject to parts and workshop availability)
- (e) The Manager shall keep records of all, servicing and repairs for a period of three years.

### **Operator Training** (e), (f)

B&B Street Sweeping trains all employees performing these works on how to select the lowest possible noise output possible while still efficiently completing the works, this training includes details of any previously identified noise sensitive sites and how best to manage those particular areas, consideration of site conditions such as prevailing winds, lay out of buildings in the area (buildings can be used to blanket noise), considering the direction of the noise being emitted ( perhaps parking the opposite direction will direct noise away from nearby residences)

Additionally, the following on the job training and information is supplied for class 2 works.

- Routes to be followed to minimise noise impacts (this mostly applies to sites receiving regular works)
- Locations of previously identified noise sensitive sites
- selection of most appropriate power setting to achieve lowest noise output while maintaining efficient work practices
- inspecting equipment for excessive noise.

8. **Employee Name:** \_\_\_\_\_

**OPERATOR TRAINING – Class 2 works**

**Introduction**

Class 2 works are those works carried outside of the hours of

- (a) 0700 hours and 1900 hours on any day that is not a Sunday or a public holiday; or
- (b) 0900 hours and 1900 hours on a Sunday or public holiday;

B&B Street Sweeping has submitted an NMP that allows us to complete these works outside of these hours.

It is important that all operators are aware of the NMP and measures required to maintain compliance, failure to adhere to company policy regards Class 2 works may result in disciplinary action.

To ensure compliance with the NMP and minimize noise complaints it is important that all operators are aware of factors influencing noise levels at point of reception, locations of previously identified noise sensitive sites and measures that can be considered to reduce noise received.

- All regular jobs have a developed route plan designed to minimise noise reception at known sensitive sites, operators must be aware of the route to be followed at each particular job, the dispatch manager can supply copies of the route plan and details of locations of sensitive sites.
- When working in an area that has noise sensitive sites, known or identified onsite, it is expected that operators will choose from the following list of techniques to minimise noise received if practicable.
  1. Consider that noise travels from the rear of sweepers and eductors, can you alter the orientation of this equipment to direct noise away from noise sensitive sites.
  2. Consider using a lower power setting if possible, this is particularly effective with noise from petrol driven blowers and vacuum sweepers.
- Operators must complete the usual prestart as per company induction, additionally operators completing class 2 works must pay close attention to any parts that may increase noise levels and specifically noise limiting devices such as mufflers, cowlings, and enclosures. Any faults must be reported to shift supervisor immediately.
- Following this written induction your supervisor will demonstrate noise minimization techniques outlined above and will then assess your competency to implement those measures, no class 2 works are to be performed until this sheet with the operator's name and signature is signed by the supervisor.

Employee Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## 9. DESCRIPTION OF SPECIFIED WORKS (a), (d)

The specified works to which this plan relates are Waste Collection, Sweeping/ Cleaning and Drain Cleaning activities [regulation 14A(1)(A,B&C)], conducted by B&B Street Sweeping within the Shire's boundaries between hours of 4.30am and 7:00am Monday to Saturday or 4.30 am to 9am Sundays and Public Holidays.

### Significant noise emitting equipment to be used during the works are:

Truck mounted sweepers

- Manufacturer - MJE
- Model LT605 x 1unit  
VT605 x 3units  
600 series (back up sweeper)

Please see manufacturer noise output sheet attached

Leaf blowers

- Manufacturer – Stihl, Husqvarna
- Model bg86 356BT x series

Please see noise output on manufacturer specification sheets attached

Footpath sweepers

- Manufacturer – Tennant
- Model S30, 6650xp, ATLV 4300

Please see noise output on manufacturer specification sheets attached

Drain cleaner trucks

- Manufacturer - DCS, MJE
- Model - Predator, N/A custom

Please note these units are pto driven, much of the noise emitted is from the propulsion system of the truck and as such would be proportionally exempt. The most significant noise emitted is from the Moro M9 vacuum pump fitted to the MJE unit, a manufacturers specification sheet containing noise output is attached.

Eductor trucks

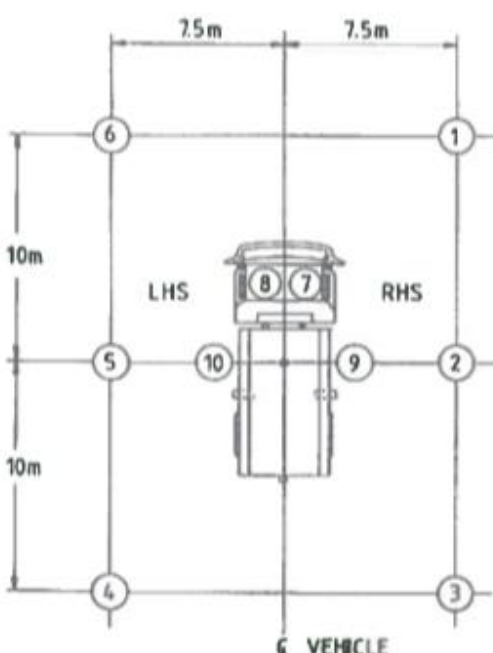
- Please refer to truck mounted sweepers

Controlled waste vehicles

- Moro M9 vacuum pump

Please see noise output on manufacturer specification sheet attached.

Please note that new equipment will be introduced into the works in the manor described in our Vehicle / Equipment purchase policy attached

GES 8/95		<b>MJE</b>		MacDonald Johnston Engineering Company Pty Ltd <small>ACN004962090</small>		<b>SD-RS-065</b>											
<b>GENERAL ENGINEERING STANDARDS</b>						REVISION: <b>01</b>	SHEET OF <b>2</b>										
TITLE: <b>VT SERIES LO-TOP</b>			SUBTITLE: <b>w/HINO RANGER PRO 9 CAB/CHASSIS</b>														
SPECIFICATION: <b>NOISE LEVEL SPECIFICATION</b>					DATE: <b>21/10/04</b>												
<p>Noise levels of Road sweepers are tested with principles as documented in ADR 28/00 - Australian Design Rule "Noise Level of Motor Vehicles".</p> <table border="0"> <tr> <td>1.) Equipment: <i>Lutron SL-4000 integrating sound level meter to AS1259 IEC651 Type 1 DIN 45633 JIS1502 Serial No.: HQ09500 Weighting - 'A' Response - Fast Windshield fitted Microphone height: 1.2 m Calibrator - 94 dB(A) - maximum deviation allowed: 1 dB(A) Tachometer: Electronic</i></td> <td>3.) Background dB(A): <i>48 dB(A)</i></td> </tr> <tr> <td>2.) Test Reading Points <i>As shown below</i></td> <td>4.) Ambient temperature: <i>15.0°C</i></td> </tr> <tr> <td></td> <td>5.) Weather conditions: <i>Fine</i></td> </tr> <tr> <td></td> <td>6.) Wind direction: <i>N/A</i></td> </tr> <tr> <td></td> <td>7.) Wind velocity (m/sec): <i>No wind</i></td> </tr> </table>								1.) Equipment: <i>Lutron SL-4000 integrating sound level meter to AS1259 IEC651 Type 1 DIN 45633 JIS1502 Serial No.: HQ09500 Weighting - 'A' Response - Fast Windshield fitted Microphone height: 1.2 m Calibrator - 94 dB(A) - maximum deviation allowed: 1 dB(A) Tachometer: Electronic</i>	3.) Background dB(A): <i>48 dB(A)</i>	2.) Test Reading Points <i>As shown below</i>	4.) Ambient temperature: <i>15.0°C</i>		5.) Weather conditions: <i>Fine</i>		6.) Wind direction: <i>N/A</i>		7.) Wind velocity (m/sec): <i>No wind</i>
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<p style="text-align: center;">MACDONALD JOHNSTON ENGINEERING EXERCISE A PROGRAMME OF CONTINUAL PRODUCT DEVELOPMENT AND IN THIS CONTEXT RESERVE THE RIGHT TO AMEND SPECIFICATIONS WITHOUT PRIOR NOTICE.</p>																	

GES 8/95	<b>MJE</b>	MacDonald Johnston Engineering Company Pty Ltd <small>A Subsidiary</small>	<b>SD-RS-065</b>																																																																																																	
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<p><b>TEST FUNCTION</b></p> <ul style="list-style-type: none"> <li>- Vehicle in stationary condition (cabin windows raised/air-conditioning off)</li> <li>- LHS nozzle down</li> <li>- LHS flap open</li> <li>- CB and WSB operating</li> </ul> <p>1. VT Series Lo-Top Road sweeper (dual machine) fitted to Ranger Pro 9 cab/chassis at 1200 rpm</p> <table border="1"> <thead> <tr> <th>LOCATION</th> <th>READING dB(A)</th> <th>LOCATION</th> <th>READING dB(A)</th> </tr> </thead> <tbody> <tr><td>1</td><td>69</td><td>6</td><td>71.7</td></tr> <tr><td>2</td><td>75.1</td><td>7</td><td>62.2</td></tr> <tr><td>3</td><td>72</td><td>8</td><td>62.2</td></tr> <tr><td>4</td><td>72.4</td><td>9</td><td>84.4</td></tr> <tr><td>5</td><td>79.1</td><td>10</td><td>86.1</td></tr> </tbody> </table> <p>2. VT Series Lo-Top Road sweeper (dual machine) fitted to Ranger Pro 9 cab/chassis at 1400 rpm</p> <table border="1"> <thead> <tr> <th>LOCATION</th> <th>READING dB(A)</th> <th>LOCATION</th> <th>READING dB(A)</th> </tr> </thead> <tbody> <tr><td>1</td><td>70.1</td><td>6</td><td>75.8</td></tr> <tr><td>2</td><td>76.1</td><td>7</td><td>65.1</td></tr> <tr><td>3</td><td>72</td><td>8</td><td>65.1</td></tr> <tr><td>4</td><td>75.9</td><td>9</td><td>84.6</td></tr> <tr><td>5</td><td>81.5</td><td>10</td><td>91.3</td></tr> </tbody> </table> <p>3. VT Series Lo-Top Road sweeper (dual machine) fitted to Ranger Pro 9 cab/chassis at 1800 rpm</p> <table border="1"> <thead> <tr> <th>LOCATION</th> <th>READING dB(A)</th> <th>LOCATION</th> <th>READING dB(A)</th> </tr> </thead> <tbody> <tr><td>1</td><td>77.5</td><td>6</td><td>84.1</td></tr> <tr><td>2</td><td>83.1</td><td>7</td><td>69</td></tr> <tr><td>3</td><td>81.9</td><td>8</td><td>69.9</td></tr> <tr><td>4</td><td>84.7</td><td>9</td><td>91.8</td></tr> <tr><td>5</td><td>87.5</td><td>10</td><td>94.8</td></tr> </tbody> </table> <p>4. VT Series Lo-Top Road sweeper (dual machine) fitted to Ranger Pro 9 cab/chassis at 2050 rpm</p> <table border="1"> <thead> <tr> <th>LOCATION</th> <th>READING dB(A)</th> <th>LOCATION</th> <th>READING dB(A)</th> </tr> </thead> <tbody> <tr><td>1</td><td>77.9</td><td>6</td><td>85.7</td></tr> <tr><td>2</td><td>84.5</td><td>7</td><td>71.5</td></tr> <tr><td>3</td><td>80.4</td><td>8</td><td>71.9</td></tr> <tr><td>4</td><td>85.1</td><td>9</td><td>92.3</td></tr> <tr><td>5</td><td>88.8</td><td>10</td><td>96.5</td></tr> </tbody> </table>					LOCATION	READING dB(A)	LOCATION	READING dB(A)	1	69	6	71.7	2	75.1	7	62.2	3	72	8	62.2	4	72.4	9	84.4	5	79.1	10	86.1	LOCATION	READING dB(A)	LOCATION	READING dB(A)	1	70.1	6	75.8	2	76.1	7	65.1	3	72	8	65.1	4	75.9	9	84.6	5	81.5	10	91.3	LOCATION	READING dB(A)	LOCATION	READING dB(A)	1	77.5	6	84.1	2	83.1	7	69	3	81.9	8	69.9	4	84.7	9	91.8	5	87.5	10	94.8	LOCATION	READING dB(A)	LOCATION	READING dB(A)	1	77.9	6	85.7	2	84.5	7	71.5	3	80.4	8	71.9	4	85.1	9	92.3	5	88.8	10	96.5
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# S30 Mid-Size Rider Sweeper

REQUEST A FREE DEMO

SPECIFICATIONS

## SPECIFICATIONS

- Air Technology / Broom Technology: Broom Technology
- Application: Indoor, Outdoor, Indoor & Outdoor
- Dump Type: High Dump
- Estimated Run Time: Continuous
- Main Brush Dimensions: 45 in / 1145 mm
- Sound Level: As low as 80 dBA +/- 3.0 dBA (G/LP), 83 dBA +/- 3.0 dBA (Diesel)
- Propelling Speed: Up to 8 mph / 12.9 km/h
- Sweep Technology: Direct Throw

[Show more](#)



TECHNICAL SPECIFICATIONS 6650

		LPG	Diesel
<b>Machine Dimensions</b>			
Working width (single side brush)	cm	156	156
Working width (dual side brushes)	cm	193	193
Dimensions (lwxh)	cm	236x159x147	236x159x147
Machine weight (net)	kg	1600	1600
<b>Sweeping System</b>			
Area coverage theoretical (max)	m <sup>2</sup> /h	31,073	31,075
Area coverage practical (max)	m <sup>2</sup> /h	14,240	14,240
Length main brush x dia	cm	114 x 36	114 x 36
Diameter side brush	cm	66	66
Sweeping principle		direct throw	direct throw
Transaxle drive	yes/no	yes	yes
<b>Recovery System</b>			
Panel filter capacity	m <sup>2</sup>	7.2	7.2
Airflow	L/s	203	203
Hopper capacity, volume	L	396	396
Hopper capacity, weight	kg	410	410
Hopper dump height	cm	152	152
<b>Power</b>			
Power source		12V	12V
Total power consumption	W	41,000	27,200
Protection class	I/II/III	III	III
Sound level (DIN45635)	dB(A)	83	85
<b>Propelling</b>			
Transport speed	km/h	16.1	16.1
Working speed	km/h	8	8
Climbing capacity	%	27	27
Turning circle	cm	287	287

**Configuration**

- LPG XP
- LPG XS
- Diesel XP
- Diesel XS



# ATLV All-Terrain Litter Vacuum

REQUEST A FREE DEMO

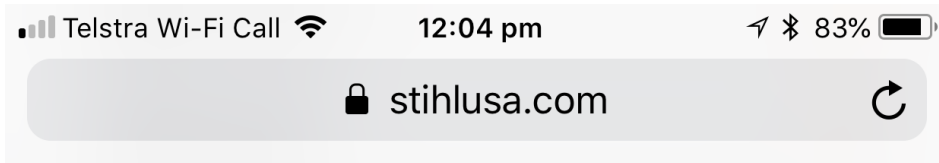
## SPECIFICATIONS

- Application: Outdoor
- Dump Type: Manual
- Estimated Run Time: Continuous
- Main Brush Dimensions: Brush unit not available
- Sound Level: As low as 89.7 dBA
- Propelling Speed: Up to 16 mph / 26 km/h

Moro M9

PERFORMANCE SPECIFICATIONS

Specification	Unit	Value
Free air capacity	cfm	547
Air capacity at 15" Hg/50% vacuum	cfm	487
Max. Vacuum	Hg (in.)	28
Max. Pressure	psig	14.5
Power required at 15" of vacuum	hp	25.8
Power required at max. pressure	hp	46
Rotation speed	rpm	1000
Oil tank capacity	quart(us)	1.45
Oil consumption	gal (US)/Hr	0.063
Sound pressure at 7 meters (23 ft) 60% vacuum	dB	73
Hose	in	-
Flange	in	4
Weight	lbs	970



**Specifications**

DISPLACEMENT	27.2 cc (1.66 cu. in.)
ENGINE POWER	0.8 kW (1.07 bhp)
WEIGHT	4.4 kg (9.7 lbs.)
FUEL CAPACITY	440 cc (14.9 oz.)
BLOWING FORCE*	15 Newtons
AVG. AIR VELOCITY**	Flat: 74 m/sec. (166 mph) Round: 63 m/sec. (141 mph)
MAX. AIR VELOCITY**	Flat: 85 m/sec. (190 mph) Round: 69 m/sec. (154 mph)
AIR VOLUME AT NOZZLE**	Flat: 620 m <sup>3</sup> /h (365 cfm) Round: 755 m <sup>3</sup> /h (444 cfm)
SOUND PRESSURE RATING**	70 dB(A)
POWER SOURCE	Gas

\*Newton is the force needed to accelerate 1 kg of mass at the rate of 1 m/sec<sup>2</sup>. \*\*Tested in accordance with ANSI 175.2 standard. All specifications provided by Andreas STIHL AG, as of April 2016.

**Important Information**



**Husqvarna 365BT x series**

Max. engine output, acc. to ISO 8893, kW/ rpm	2,4/6000
Catalytic converter muffler	No
<b>Ignition system</b>	
Manufacturer/type of ignition system	Ducati ET
Spark plug	NGK BPMR 7A
Electrode gap, inch/mm	0,02/0,5
<b>Fuel and lubrication system</b>	
Manufacturer/type of carburetor	Zama EL27
Fuel tank capacity, US pint/litre	1,5
<b>Weight</b>	
Weight without fuel, Lbs/kg	22,9/10,4
<b>Sound levels</b>	
Sound level measured at 50 ft (15m) per ANSI B175.2, dB (A)	64
<b>Vibration levels</b>	
Vibration levels at handles, measured according to EN/ISO 11806 and ISO 7916, m/s <sup>2</sup>	
At idle, right handle:	1,3
At max. speed, right handle:	4,2
With handle (accessory)	
At idle, left/right handles:	1,7/2,5
At max. speed, left/right handles:	2,5/4,8
<b>Fan performance</b>	
Max. air velocity with standard nozzle, m/s:	70

**What the community can expect from B&B Street Sweeping with regard to works under this NMP.** (f)

While this NMP seeks approval for all hours covered by Class 2 works due to the reactive nature of our business, B & B has no intention of including works that would otherwise be possible under class 1 in class 2 works except;

- when site conditions determine that class 1 works are not possible due to safety, efficiency, efficacy or adverse effects on traffic, pedestrians, or businesses.
- When the customer communicates a specific need for Class 2 works

**10. COMMUNITY INFORMATION** (f), (e), (b)

**Community information on the manner in which the specified works will be carried out**

B&B Street Sweeping completes class 2 works for local and state government departments, for construction/and maintenance companies, commercial or industrial complexes.

B&B Street Sweepings Scheduling officers use the following template to determine suitability for scheduling Class 2 works.

This information can be made available at request or if required can be placed on our website.

**Prescheduling considerations for currently Unscheduled Works:**

- Are there likely noise emissions that would (at point of receipt) that would exceed statutory limits.
- Can the work effectively be completed during regular hours, acceptable reasons to schedule work outside of regular hours include - impacts on traffic or pedestrians, access, safety concerns and customer requirements.
- Include details of known noise sensitive sites relevant to the works and, if possible, mitigation measures that may be used in that area.

**General Methodology for known works** – Subject to change due to site conditions.

**APPENDIX 2**  
Map of line item 1 price schedule area to be Mechanically swept.



**LARGE SWEEPER**  
From 4.30am to 7.00am  
1<sup>st</sup> Sweep - **PINK**  
2<sup>nd</sup> Sweep - **GREEN**  
3<sup>rd</sup> Sweep - **BLUE**

**APPENDIX 2**  
Map of line item 1 price schedule area to be Mechanically swept.



**PATH SWEEPER**  
From 4.30am to 7.00am  
1<sup>st</sup> Sweep - **PINK**  
2<sup>nd</sup> Sweep - **GREEN**

**APPENDIX 3**

Map of line item 2 price schedule area to be Mechanically swept in blue marking through car parks of the commercial building. Inclusive of Forrest Road and footpaths.

Works will be undertaken on request through the periods of June – September when leaves from the London plain trees are falling and creating disturbance. However, it should be anticipated that the request will come in for sweeping early in the mornings every day – second day during the specific disturbance period.



From 5.30am to 7.00am

1<sup>st</sup> Sweep - PINK

2<sup>nd</sup> Sweep - BLUE

B&B Street Sweepings operators use the following methodology to complete the works with the best noise outcomes practicable.

Operator's methodology

- Upon arrival determine location of potential noise sensitive sites
- The operator will determine the most efficient way to complete the works. (note efficient works usually equals overall shorter duration of noise)
- Starting as far from those noise sensitive sites as is practicable
- If sweeping, the operator will now use hand methods (shovel, broom and blower) to remove debris from corners inaccessible to the sweeper then employ the most efficient route as described above to complete the works.
- Drain cleaning - works consider directionality of noise emission and if possible set up in a way that directs noise away from not towards noise sensitive sites.
- Potential mitigation measures around known noise sensitive sites would include consideration for recommending rescheduling that location later in the route if possible, decreasing output momentarily particularly as the sweeper moves way from that site (noise from full size sweepers is directional rearward)
- At all times use the lowest power setting that will efficiently complete the job.

**11. COMPLAINT RESPONSE (g)**

- Complaints can be made by contacting B&B Street Sweeping on 0428256161, all complaints shall include the location and time of the alleged incident, the name and contact details of the complainant.
- B&B Street Sweeping Works Supervisor shall be responsible for investigating complaints. The supervisor may request assistance of the Shire of Capel Environmental Health Services if deemed appropriate to assist in the investigation.
- All noise complaints received regarding specified works under this plan are to be investigated by B&B Street Sweeping and may include verification of location of mobile plant by satellite tracking if applicable.
- The complainant shall be advised of the outcome of the investigation.
- Complaints received with the location and time of the alleged incident, the name and contact details of the complainant shall be recorded and kept for 12 months.
- Any complaints made directly to the Shire will be forwarded to B&B Street Sweeping, and an outcome of the investigation shall be provided to the Shire's environmental officer on request.

**Responsibilities**

- B&B Street Sweeping's Branch Manager shall be responsible for the implementation of this plan.

**Evaluation / Annual review**

B&B will evaluate new technologies, review noise complaints and operations annually as part of the continuous improvement policy, where practicable improvements can be made, without impacting the works and fit within budgetary constraints, they will be considered for inclusion into the revised NMP.