

## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 5/31/2023  
**Case Description:** Linear, Grubbing and Land Clearing

**Description**            **Land Use**  
 Linear, Grubbing and Land Clearing    Residential

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)
			Spec Lmax (dBA)	Actual Lmax (dBA)	
Excavator	No	40		80.7	52
Tractor	No	40	84		52

Calculated (dBA)

Equipment	*Lmax	Leq
Excavator	80.4	76.4
Tractor	83.7	79.7
<b>Total</b>	<b>83.7</b>	<b>81.3</b>

\*Calculated Lmax is the Loudest value.

## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 5/31/2023

**Case Description:** Linear, Grading, Excavation, and Pipeline Installation

**Description**      **Land Use**  
 Linear, Grading,  
 Excavation, and  
 Pipeline Installation      Residential

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)
			Spec Lmax (dBA)	Actual Lmax (dBA)	
Excavator	No	40		80.7	52
Slurry Trenching Machine	No	50		80.4	52
Grader	No	40	85		52
Drill Rig Truck	No	20		79.1	52

Calculated (dBA)

Equipment	*Lmax	Leq
Excavator	80.4	76.4
Slurry Trenching Machine	80	77
Grader	84.7	80.7
Drill Rig Truck	78.8	71.8
<b>Total</b>	<b>84.7</b>	<b>83.5</b>

\*Calculated Lmax is the Loudest value.

# Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 5/31/2023  
**Case Description:** Linear, Paving

**Description**            **Land Use**  
 Linear, Paving            Residential

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)
			Spec Lmax (dBA)	Actual Lmax (dBA)	
Paver	No	50		77.2	52
Pavement Scarafier	No	20		89.5	52

Calculated (dBA)

Equipment	*Lmax	Leq
Paver	76.9	73.9
Pavement Scarafier	89.2	82.2
<b>Total</b>	<b>89.2</b>	<b>82.8</b>

\*Calculated Lmax is the Loudest value.

# Roadway Construction Noise Model (RCNM),Version 1.1

**Report date:** 8/7/2023  
**Case Description:** WRP - Site Preparation

**Description**                      **Land Use**  
 WRP - Site Preparation          Residential

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)
			Spec Lmax (dBA)	Actual Lmax (dBA)	
Grader	No	40	85		127
Dozer	No	40		81.7	127
Tractor	No	40	84		127

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	76.9	72.9
Dozer	73.6	69.6
Tractor	75.9	71.9
<b>Total</b>	<b>76.9</b>	<b>76.5</b>

\*Calculated Lmax is the Loudest value.

**Report date:** 8/7/2023  
**Case Description:** Site Preparation

**Description**  
 WRP - Grading

**Land Use**  
 Residential

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)
			Spec Lmax (dBA)	Actual Lmax (dBA)	
Grader	No	40	85		127
Dozer	No	40		81.7	127
Tractor	No	40	84		127
Tractor	No	40	84		127

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	76.9	72.9
Dozer	73.6	69.6
Tractor	75.9	71.9
Tractor	75.9	71.9
<b>Total</b>	<b>76.9</b>	<b>77.8</b>

\*Calculated Lmax is the Loudest value.

## Roadway Construction Noise Model (RCNM),Version 1.1

**Report date:** 8/7/2023  
**Case Description:** Building Construction, Paving, Painting

Description	Land Use	Equipment				
		Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)
WRP - Building Construction, Paving, Painting	Residential					
Crane		No	16		80.6	127
Gradall		No	40		83.4	127
Generator		No	50		80.6	127
Tractor		No	40	84		127
Welder / Torch		No	40		74	127
Welder / Torch		No	40		74	127
Welder / Torch		No	40		74	127
Concrete Mixer Truck		No	40		78.8	127
Paver		No	50		77.2	127
Pavement Scarafier		No	20		89.5	127
Roller		No	20		80	127
Tractor		No	40	84		127
Compressor (air)		No	40		77.7	127

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	72.5	64.5
Gradall	75.3	71.3
Generator	72.5	69.5
Tractor	75.9	71.9
Welder / Torch	65.9	61.9
Welder / Torch	65.9	61.9
Welder / Torch	65.9	61.9
Concrete Mixer Truck	70.7	66.7
Paver	69.1	66.1
Pavement Scarafier	81.4	74.4
Roller	71.9	64.9
Tractor	75.9	71.9
Compressor (air)	69.6	65.6
<b>Total</b>	<b>81.4</b>	<b>80.2</b>

\*Calculated Lmax is the Loudest value.

# Roadway Construction Noise Model (RCNM),Version 1.1

**Report date:** 5/31/2023

**Case Description:** Site Preparation

**Description**      **Land Use**  
 MP 113.2 Pump - Residential  
 Site Preparation

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)
			Spec Lmax (dBA)	Actual Lmax (dBA)	
Grader	No	40	85		353
Dozer	No	40		81.7	353
Tractor	No	40	84		353

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	68	64
Dozer	64.7	60.7
Tractor	67	63
<b>Total</b>	<b>68</b>	<b>67.6</b>

\*Calculated Lmax is the Loudest value.

## Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/31/2023

Case Description: Grading

Description Land Use  
**MP 113.2 Pump -** Residential  
**Grading**

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)
			Spec Lmax (dBA)	Actual Lmax (dBA)	
Grader	No	40	85		353
Dozer	No	40		81.7	353
Tractor	No	40	84		353
Tractor	No	40	84		353

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	68	64
Dozer	64.7	60.7
Tractor	67	63
Tractor	67	63
<b>Total</b>	<b>68</b>	<b>68.9</b>

\*Calculated Lmax is the Loudest value.



## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 5/31/2023

**Case Description:** Building Construction, Paving, Painting

**Description**            **Land Use**  
 MP 113.2 Pump -        Residential  
 Building Construction,  
 Paving, Painting

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)
			Spec Lmax (dBA)	Actual Lmax (dBA)	
Crane	No	16		80.6	353
Gradall	No	40		83.4	353
Generator	No	50		80.6	353
Tractor	No	40	84		353
Welder / Torch	No	40		74	353
Welder / Torch	No	40		74	353
Welder / Torch	No	40		74	353
Concrete Mixer Truck	No	40		78.8	353
Paver	No	50		77.2	353
Pavement Scarafier	No	20		89.5	353
Roller	No	20		80	353
Tractor	No	40	84		353
Compressor (air)	No	40		77.7	353

### Calculated (dBA)

Equipment	*Lmax	Leq
Crane	63.6	55.6
Gradall	66.4	62.4
Generator	63.7	60.6
Tractor	67	63
Welder / Torch	57	53
Welder / Torch	57	53
Welder / Torch	57	53
Concrete Mixer Truck	61.8	57.8
Paver	60.2	57.2
Pavement Scarafier	72.5	65.5
Roller	63	56
Tractor	67	63
Compressor (air)	60.7	56.7
<b>Total</b>	<b>72.5</b>	<b>71.3</b>

\*Calculated Lmax is the Loudest value.