

# **APPENDIX G**

## *Noise Impact Modeling Data*



Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/17/2018  
 Case Description: DMV\_Demolition

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 20'	Residential	65	60	55

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	20	0
Dozer	No	40		81.7	40	0
Tractor	No	40	84		60	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax
Excavator	88.7	84.7	N/A	N/A	N/A	N/A	N/A
Dozer	83.6	79.6	N/A	N/A	N/A	N/A	N/A
Tractor	82.4	78.4	N/A	N/A	N/A	N/A	N/A
Total	88.7	86.6	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Typical Receiver 200'	Residential	65	60	55

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	200	0
Dozer	No	40		81.7	200	0
Tractor	No	40	84		200	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	N/A
Dozer	69.6	65.6	N/A	N/A	N/A	N/A	N/A

Tractor		72	68	N/A	N/A	N/A	N/A	N/A
Total		72	71.1	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 4/17/2018  
Case Description: DMV\_Earthwork & Infrastructure

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)			Equipment			
		Daytime	Evening	Night	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Nearest Receiver 20'	Residential	65	60	55				
Description		Impact Device	Usage(%)					
Compactor (ground)		No	20		83.2	20	0	
Dozer		No	40		81.7	50	0	
Scraper		No	40		83.6	75	0	
Tractor		No	40	84		100	0	

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax
Compactor (ground)	91.2	84.2	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A
Scraper	80.1	76.1	N/A	N/A	N/A	N/A	N/A
Tractor	78	74	N/A	N/A	N/A	N/A	N/A
Total	91.2	85.9	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)			Equipment			
		Daytime	Evening	Night	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Typical Receiver 200'	Residential	65	60	55				
Description		Impact Device	Usage(%)					
Compactor (ground)		No	20		83.2	200	0	
Dozer		No	40		81.7	200	0	
Scraper		No	40		83.6	200	0	
Tractor		No	40	84		200	0	

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day	Evening	Night		
Compactor (ground)	71.2	64.2	N/A	N/A	N/A	N/A	N/A
Dozer	69.6	65.6	N/A	N/A	N/A	N/A	N/A
Scraper	71.5	67.6	N/A	N/A	N/A	N/A	N/A
Tractor	72	68	N/A	N/A	N/A	N/A	N/A
Total	72	72.6	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

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

Report date: 4/17/2018  
Case Description: DMV\_ Exterior Elements and Finishes

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 20'	Residential	65	60	55

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Man Lift	No	20		74.7	20	0
Compressor (air)	No	40		77.7	50	0
Excavator	No	40		80.7	75	0
Excavator	No	40		80.7	100	0

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day	Evening	Night		
Man Lift	82.7	75.7	N/A	N/A	N/A	N/A	N/A
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A
Excavator	77.2	73.2	N/A	N/A	N/A	N/A	N/A
Excavator	74.7	70.7	N/A	N/A	N/A	N/A	N/A
Total	82.7	79.7	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Typical Receiver 200'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Man Lift	No	20		74.7	200	0
Compressor (air)	No	40		77.7	200	0
Excavator	No	40		80.7	200	0
Excavator	No	40		80.7	200	0

Equipment	Results							
	Calculated (dBA)				Noise Limits (dBA)			
			Day		Evening		Night	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Man Lift	62.7	55.7	N/A	N/A	N/A	N/A	N/A	
Compressor (air)	65.6	61.6	N/A	N/A	N/A	N/A	N/A	
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	N/A	
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	N/A	
Total	68.7	68.9	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 4/17/2018  
Case Description: DMV\_Interior Elements and Finishes

---- Receptor #1 ----				
Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 20'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Man Lift	No	20		74.7	20	0
Compressor (air)	No	40		77.7	50	0
Excavator	No	40		80.7	75	0

Equipment	Results							
	Calculated (dBA)				Noise Limits (dBA)			
			Day		Evening		Night	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Man Lift	82.7	75.7	N/A	N/A	N/A	N/A	N/A	
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	
Excavator	77.2	73.2	N/A	N/A	N/A	N/A	N/A	
Total	82.7	79.7	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Typical Receiver 200'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Man Lift	No	20		74.7	200	0
Compressor (air)	No	40		77.7	200	0
Excavator	No	40		80.7	200	0

Equipment	Results							
	Calculated (dBA)				Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Evening Lmax	Leq	Evening Leq	Night Lmax	
Man Lift	62.7	55.7	N/A	N/A	N/A	N/A	N/A	
Compressor (air)	65.6	61.6	N/A	N/A	N/A	N/A	N/A	
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	N/A	
<b>Total</b>	<b>68.7</b>	<b>66.8</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/17/2018  
 Case Description: DMV\_Structural and Building Envelope

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 20'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Crane	No	16		80.6	20	0
Excavator	No	40		80.7	50	0
Tractor	No	40	84		75	0

Equipment	Results							
	Calculated (dBA)				Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Evening Lmax	Leq	Evening Leq	Night Lmax	
Crane	88.5	80.6	N/A	N/A	N/A	N/A	N/A	

Excavator		80.7	76.7	N/A	N/A	N/A	N/A	N/A
Tractor		80.5	76.5	N/A	N/A	N/A	N/A	N/A
	Total	88.5	83.1	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Receiver 200'	Residential	65	60	55

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Impact Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Crane	No		16	80.6	200	0
Excavator	No		40	80.7	200	0
Tractor	No		40	84	200	0

		Results						
		Calculated (dBA)			Noise Limits (dBA)			
				Day	Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Crane		68.5	60.6	N/A	N/A	N/A	N/A	N/A
Excavator		68.7	64.7	N/A	N/A	N/A	N/A	N/A
Tractor		72	68	N/A	N/A	N/A	N/A	N/A
	Total	72	70.2	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.