

## **APPENDIX G**

---

NOISE DATA

**FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels**

**Project Name:** Townes at Orange Avenue  
**Project Number:** 194451001  
**Scenario:** Existing  
**Ldn/CNEL:** CNEL

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	CNEL at 100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL
1	Orange Avenue	Magnolia Avenue to Brookhurst Street	2	0	5000	35	0	1.0%	0.1%	55.8	-	-	38	121

**FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels**

**Project Name:** Townes at Orange Avenue  
**Project Number:** 094556050  
**Scenario:** Existing Plus Project  
**Ldn/CNEL:** CNEL

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	CNEL at 100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL
1	Orange Avenue	Magnolia Avenue to Brookhurst Street	2	0	4729	35	0	1.0%	0.1%	55.6	-	-	36	114

## Noise Measurement Field Data

Project:	Townes at Orange Avenue	Job Number:	094556050
Site No.:	1	Date:	6/1/2022
Analyst:	Kiana Graham	Time:	2:28 - 2:38 PM
Location:	Northwester corner of Day Care Parking Lot		
Noise Sources:	Children playing, cars, car doors shutting, traffic on Orange Ave, small airplane		
Results (dBA):			
	Leq:	Lmin:	Lmax:
	54.5	47.8	71.1
			Peak:
			99.3

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	79
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.92
Humidity:	47%

Photo:



# Measurement Report

## Report Summary

Meter's File Name	ANA.001.s	Computer's File Name	LxTse_0005586-20220601 142841-ANA.001.ldbin		
Meter	LxT SE	0005586			
Firmware	2.404				
User	Location				
Job Description					
Note					
Start Time	2022-06-01 14:28:41	Duration	0:10:00.0		
End Time	2022-06-01 14:38:41	Run Time	0:10:00.0	Pause Time	0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	54.5 dB		
LAE	82.3 dB	SEA	--- dB
EA	19.0 μPa <sup>2</sup> h		
LA <sub>peak</sub>	99.3 dB	2022-06-01 14:34:42	
LAS <sub>max</sub>	71.1 dB	2022-06-01 14:34:42	
LAS <sub>min</sub>	47.8 dB	2022-06-01 14:35:42	
LA <sub>eq</sub>	54.5 dB		
LC <sub>eq</sub>	67.8 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	13.3 dB
LAI <sub>eq</sub>	59.8 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	5.2 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LAPeak > 135.0 dB	0	0:00:00.0
LAPeak > 137.0 dB	0	0:00:00.0
LAPeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
54.5 dB	54.5 dB	0.0 dB	
LDEN	LDay	LEve	LNight
54.5 dB	54.5 dB	--- dB	--- dB

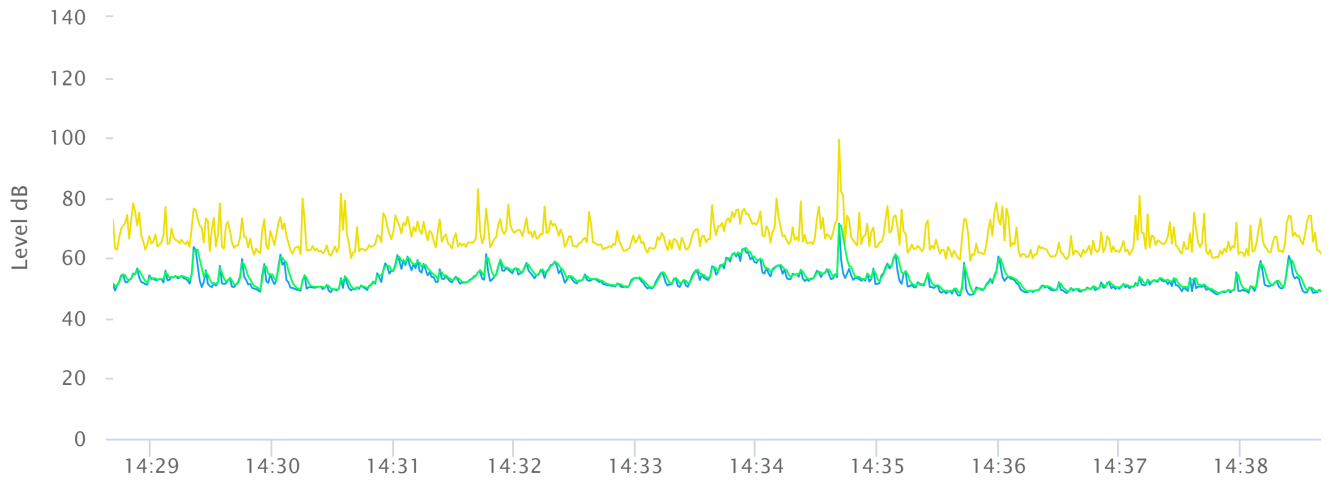
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	54.5 dB		67.8 dB		--- dB	
L <sub>S(max)</sub>	71.1 dB	2022-06-01 14:34:42	--- dB		--- dB	
L <sub>S(min)</sub>	47.8 dB	2022-06-01 14:35:42	--- dB		--- dB	
L <sub>Peak(max)</sub>	99.3 dB	2022-06-01 14:34:42	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

### Statistics

LAS 5.0	59.1 dB
LAS 10.0	57.3 dB
LAS 33.3	53.8 dB
LAS 50.0	52.6 dB
LAS 66.6	51.2 dB
LAS 90.0	49.5 dB

# Time History



— LAeq: 0.0 dB      — LApeak: 0.0 dB      — LASmax: 0.0 dB      — LASmin: 0.0 dB



## Noise Measurement Field Data

Project:	Townes at Orange Avenue	Job Number:	094556050
Site No.:	2	Date:	6/1/2022
Analyst:	Kiana Graham	Time:	2:40 - 2:50 PM
Location:	Northeast corner of Day Care Parking Lot		

Noise Sources:	Children playing, cars on Orange Avenue and Brookhurst, car repair activity, trash can doors, birds
----------------	---

Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	54.6	49.1	66.1	92.2

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	79
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.92
Humidity:	47%

Photo:



# Measurement Report

## Report Summary

Meter's File Name	ANA.002.s	Computer's File Name	LxTse_0005586-20220601 144031-ANA.002.ldbin	
Meter	LxT SE	0005586		
Firmware	2.404			
User				Location
Job Description				
Note				
Start Time	2022-06-01 14:40:31	Duration	0:10:00.0	
End Time	2022-06-01 14:50:31	Run Time	0:10:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	54.6 dB		
LAE	82.4 dB	SEA	--- dB
EA	19.1 μPa <sup>2</sup> h		
LA <sub>peak</sub>	92.2 dB	2022-06-01 14:45:47	
LAS <sub>max</sub>	66.1 dB	2022-06-01 14:42:34	
LAS <sub>min</sub>	49.1 dB	2022-06-01 14:40:32	
LA <sub>eq</sub>	54.6 dB		
LC <sub>eq</sub>	67.4 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	12.9 dB
LAI <sub>eq</sub>	57.7 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	3.2 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LAPeak > 135.0 dB	0	0:00:00.0
LAPeak > 137.0 dB	0	0:00:00.0
LAPeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
54.6 dB	54.6 dB	0.0 dB	
LDEN	LDay	LEve	LNight
54.6 dB	54.6 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	54.6 dB		67.4 dB		--- dB	
L <sub>S(max)</sub>	66.1 dB	2022-06-01 14:42:34	--- dB		--- dB	
L <sub>S(min)</sub>	49.1 dB	2022-06-01 14:40:32	--- dB		--- dB	
L <sub>Peak(max)</sub>	92.2 dB	2022-06-01 14:45:47	--- dB		--- dB	

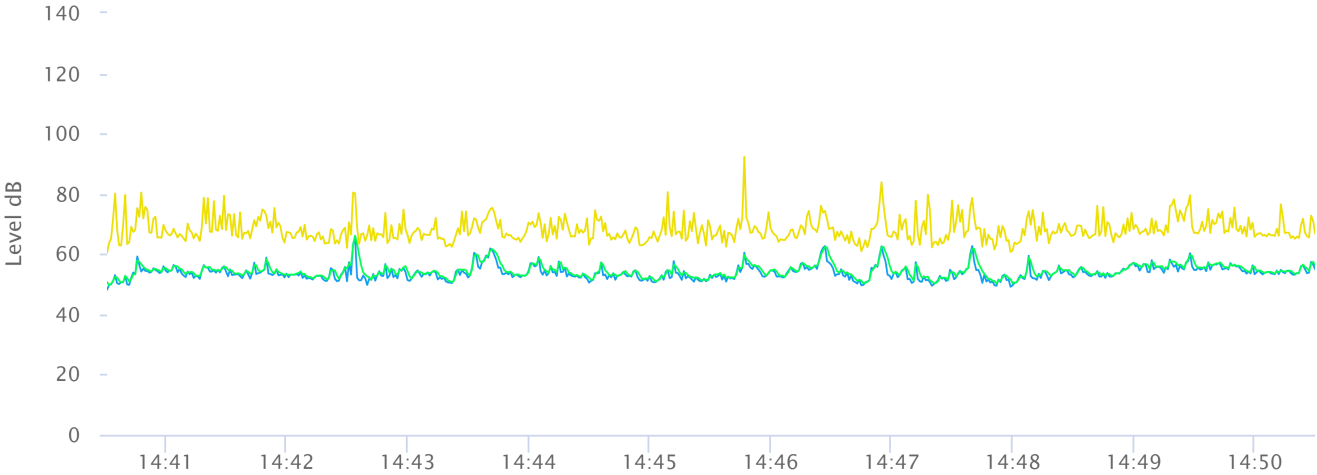
Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

### Statistics

LAS 5.0	57.7 dB
LAS 10.0	56.4 dB
LAS 33.3	54.5 dB
LAS 50.0	53.7 dB
LAS 66.6	52.9 dB
LAS 90.0	51.5 dB



# Time History



— LAeq: 0.0 dB      — LApeak: 0.0 dB      — LASmax: 0.0 dB      — LASmin: 0.0 dB



## Noise Measurement Field Data

Project:	Townes at Orange Avenue	Job Number:	094556050
Site No.:	3	Date:	6/1/2022
Analyst:	Kiana Graham	Time:	2:52 - 3:02 PM
Location:	Front of Day Care		
Noise Sources:	Cars on Orange Ave and Brookhurst, car horn, kids playing inside daycare		

Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	62.1	48.0	77.4	90.2

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	78
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.81
Humidity:	45%

Photo:



# Measurement Report

## Report Summary

Meter's File Name	ANA.003.s	Computer's File Name	ST-3.lbin
Meter	LxT SE	0005586	
Firmware	2.404		
User			Location
Job Description			
Note			
Start Time	2022-06-01 14:52:35	Duration	0:10:00.0
End Time	2022-06-01 15:02:35	Run Time	0:10:00.0
		Pause Time	0:00:00.0

## Results

### Overall Metrics

$L_{A_{eq}}$	62.1 dB		
LAE	89.9 dB	SEA	--- dB
EA	109.3 $\mu Pa^2h$		
$L_{A_{peak}}$	90.2 dB	2022-06-01 14:57:51	
$L_{S_{max}}$	77.4 dB	2022-06-01 14:57:51	
$L_{S_{min}}$	48.0 dB	2022-06-01 14:59:34	
$L_{A_{eq}}$	62.1 dB		
$L_{C_{eq}}$	73.2 dB	$L_{C_{eq}} - L_{A_{eq}}$	11.1 dB
$L_{AI_{eq}}$	63.6 dB	$L_{AI_{eq}} - L_{A_{eq}}$	1.4 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LAp <sub>peak</sub> > 135.0 dB	0	0:00:00.0
LAp <sub>peak</sub> > 137.0 dB	0	0:00:00.0
LAp <sub>peak</sub> > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
62.1 dB	62.1 dB	0.0 dB	
LDEN	LDay	LEve	LNight
62.1 dB	62.1 dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
$L_{eq}$	62.1 dB		73.2 dB		--- dB	
$L_{S_{(max)}}$	77.4 dB	2022-06-01 14:57:51	--- dB		--- dB	
$L_{S_{(min)}}$	48.0 dB	2022-06-01 14:59:34	--- dB		--- dB	
$L_{Peak(max)}$	90.2 dB	2022-06-01 14:57:51	--- dB		--- dB	

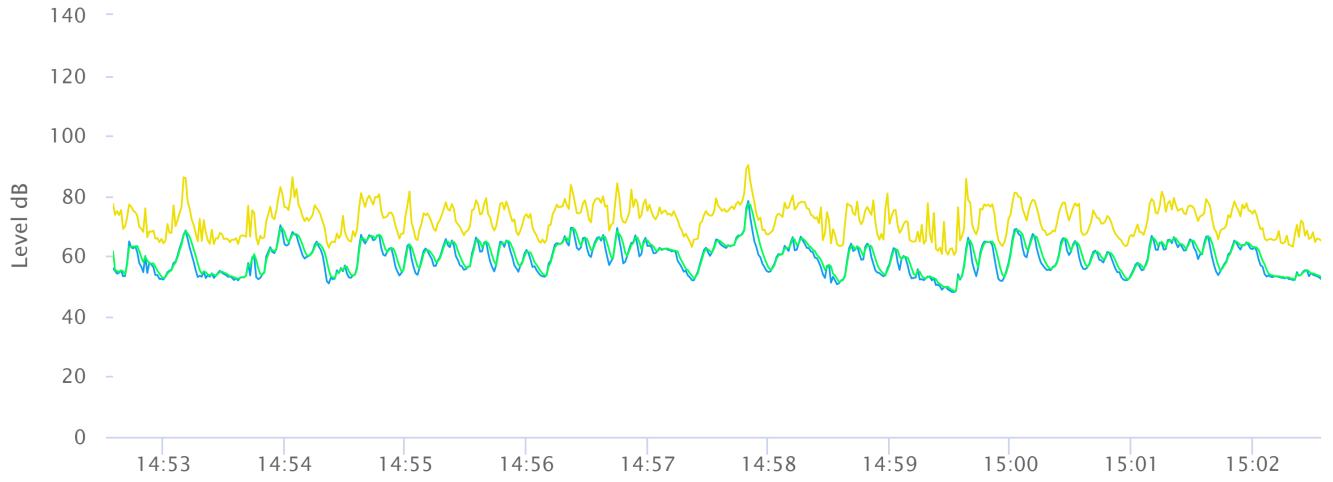
### Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

### Statistics

LAS 5.0	66.3 dB
LAS 10.0	65.2 dB
LAS 33.3	62.4 dB
LAS 50.0	60.1 dB
LAS 66.6	56.6 dB
LAS 90.0	53.2 dB

# Time History



— LAeq: 0.0 dB      — LApeak: 0.0 dB      — LASmax: 0.0 dB      — LASmin: 0.0 dB



Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/21/2022  
 Case Description: Townes at Orange\_Demolition

\*\*\*\* Receptor #1 \*\*\*\*

Description	Baselines (dBA)			
	Land Use	Daytime	Evening	Night
Single-Family Residences - NW	Residential	1.0	1.0	1.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	190.0	0.0
Generator	No	50		80.6	190.0	0.0
Concrete Saw	No	20		89.6	190.0	0.0
Dozer	No	40		81.7	190.0	0.0
Tractor	No	40	84.0		190.0	0.0
Tractor	No	40	84.0		190.0	0.0
Tractor	No	40	84.0		190.0	0.0

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Equipment	Night	Day	Calculated (dBA)		Day Night	Evening		Lmax
			Lmax	Leq		Lmax	Leq	
Crane	N/A	N/A	69.0	61.0	N/A	N/A	N/A	N/A
Generator	N/A	N/A	69.0	66.0	N/A	N/A	N/A	N/A
Concrete Saw	N/A	N/A	78.0	71.0	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	70.1	66.1	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	72.4	68.4	N/A	N/A	N/A	N/A



Dozer			69.8	65.9	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor			72.2	68.2	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor			72.2	68.2	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor			72.2	68.2	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	77.8	76.6	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #3 \*\*\*\*

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Multifamily Residences - SW	Residential	1.0	1.0	1.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	215.0	0.0
Generator	No	50		80.6	215.0	0.0
Concrete Saw	No	20		89.6	230.0	0.0
Dozer	No	40		81.7	230.0	0.0
Tractor	No	40	84.0		230.0	0.0
Tractor	No	40	84.0		230.0	0.0
Tractor	No	40	84.0		230.0	0.0

Results

Night	Day	Calculated (dBA)		Day Night	Evening		Lmax
		Lmax	Leq		Lmax	Leq	
Crane	N/A	67.9	59.9	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator		68.0	65.0	N/A	N/A	N/A	N/A





Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/21/2022  
 Case Description: Townes at Orange\_Site Preparation

\*\*\*\* Receptor #1 \*\*\*\*

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residences - NW	Residential	1.0	1.0	1.0

Description	Impact Device	Usage (%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85.0		190.0	0.0
Dozer	No	40		81.7	190.0	0.0
Tractor	No	40	84.0		190.0	0.0

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Equipment	Night	Day	Calculated (dBA)		Day		Evening		Lmax
			Lmax	Leq	Lmax	Leq	Lmax	Leq	
Grader			73.4	69.4	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer			70.1	66.1	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor			72.4	68.4	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	73.4	73.0	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #2 \*\*\*\*

Description	Land Use	Daytime	Baselines (dBA)	
			Evening	Night

-----  
Church - W      Resi denti al      1.0      1.0      1.0

-----  
Equipment

----- Descri pti on -----	----- I mpact Devi ce -----	----- Usage (%) -----	----- Spec Lmax (dBA) -----	----- Actual Lmax (dBA) -----	----- Receptor Di stance (feet) -----	----- Esti mated Shi el di ng (dBA) -----
Grader	No	40	85.0		195.0	0.0
Dozer	No	40		81.7	195.0	0.0
Tractor	No	40	84.0		195.0	0.0

-----  
Results

Noi se Li mi t Exceedance (dBA)

Noi se Li mi ts (dBA)

----- Ni ght -----	----- Cal cul ated (dBA) -----				----- Day Ni ght -----		----- Eveni ng -----			
	----- Day -----		----- Eveni ng -----		----- Day Ni ght -----		----- Eveni ng -----			
----- Equi pment -----	----- Leq -----	----- Lmax -----	----- Leq -----	----- Lmax -----	----- Leq -----	----- Lmax -----	----- Leq -----	----- Lmax -----	----- Leq -----	----- Lmax -----
Grader			73.2	69.2	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer			69.8	65.9	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor			72.2	68.2	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	73.2	72.7	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #3 \*\*\*\*

-----  
Basel i nes (dBA)

----- Descri pti on -----	----- Land Use -----	----- Dayti me -----	----- Eveni ng -----	----- Ni ght -----
Mul ti -Fami ly Resi dences - SW	Resi denti al	1.0	1.0	1.0

-----  
Equipment

----- Descri pti on -----	----- I mpact Devi ce -----	----- Usage (%) -----	----- Spec Lmax (dBA) -----	----- Actual Lmax (dBA) -----	----- Receptor Di stance (feet) -----	----- Esti mated Shi el di ng (dBA) -----
---------------------------------	--------------------------------------	--------------------------------	---	---	---	---



Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/21/2022  
 Case Description: Townes at Orange\_Grading

\*\*\*\* Receptor #1 \*\*\*\*

Description	Baselines (dBA)		
	Land Use	Daytime	Evening
Single-Family Residences - NW	Residential	1.0	1.0

Description	Impact Device	Usage (%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85.0		190.0	0.0
Dozer	No	40		81.7	190.0	0.0
Tractor	No	40	84.0		190.0	0.0
Tractor	No	40	84.0		190.0	0.0

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Equipment	Night	Day	Calculated (dBA)		Day		Evening		Lmax
			Lmax	Leq	Lmax	Leq	Lmax	Leq	
Grader			73.4	69.4	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer			70.1	66.1	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor			72.4	68.4	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor			72.4	68.4	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	73.4	74.3	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #2 \*\*\*\*

Description	Land Use	Daytime	Baselines (dBA)	
			Evening	Night
Church - W	Residential	1.0	1.0	1.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		195.0	0.0
Dozer	No	40		81.7	195.0	0.0
Tractor	No	40	84.0		195.0	0.0
Tractor	No	40	84.0		195.0	0.0

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Night	Calculated (dBA)					Day		Evening				
	Day		Evening		Night							
Equipment		Lmax		Leq		Lmax		Leq		Lmax		
Leq	Lmax	Leq	Lmax	Leq	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Grader	N/A	N/A	73.2	69.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	69.8	65.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	72.2	68.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	N/A	N/A	72.2	68.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total			73.2	74.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #3 \*\*\*\*

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Mul ti -Fami ly Residences - SW	Residential	1.0	1.0	1.0



Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/21/2022  
 Case Description: Townes at Orange\_Building Construction

\*\*\*\* Receptor #1 \*\*\*\*

Description	Baselines (dBA)				
	Land Use	Daytime	Evening	Night	
Single-Family Residences - NW	Residential	1.0	1.0	1.0	

Estimated Shielding Description	Equipment		Spec	Actual	Receptor	(dBA)
	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	
Crane 0.0	No	16		80.6	190.0	
All Other Equipment > 5 HP 0.0	No	50	85.0		190.0	
Generator 0.0	No	50		80.6	190.0	
Tractor 0.0	No	40	84.0		190.0	
Welder / Torch 0.0	No	40		74.0	190.0	
Welder / Torch 0.0	No	40		74.0	190.0	
Welder / Torch 0.0	No	40		74.0	190.0	

Results

Noise Limit Exceedance (dBA)						Noise Limits (dBA)			
Night	Day	Calculated (dBA)				Day		Evening	
		Evening				Night			
Equipment		Lmax		Leq		Lmax		Leq	
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
-----									

Crane				69.0	61.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP				73.4	70.4	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator				69.0	66.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor				72.4	68.4	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch				62.4	58.4	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch				62.4	58.4	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch				62.4	58.4	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			Total	73.4	74.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #2 \*\*\*\*

Description	Land Use	Daytime	Baselines (dBA)			Receptor	
			Evening	Night			
-----	-----	-----	-----	-----	-----	-----	-----
Church - W	Residential	1.0	1.0	1.0			
			Equipment				
					Spec	Actual	Receptor
Estimated		Impact	Usage	Lmax	Lmax	Distance	
Shiel ding		Devi ce	(%)	(dBA)	(dBA)	(feet)	(dBA)
-----		-----	-----	-----	-----	-----	-----
Crane		No	16		80.6	195.0	
0.0							
All Other Equipment > 5 HP		No	50	85.0		195.0	
0.0							
Generator		No	50		80.6	195.0	
0.0							
Tractor		No	40	84.0		195.0	
0.0							
Welder / Torch		No	40		74.0	195.0	
0.0							
Welder / Torch		No	40		74.0	195.0	
0.0							
Welder / Torch		No	40		74.0	195.0	
0.0							

Results



-----  
 Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA)				Day		Evening	
		Evening		Night		Evening		Night	
Equipment		Lmax		Leq		Lmax		Leq	
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane			68.7		60.8	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP			73.2		70.2	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator			68.8		65.8	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor			72.2		68.2	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch			62.2		58.2	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch			62.2		58.2	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch			62.2		58.2	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	73.2		73.8	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #3 \*\*\*\*

Description	Baselines (dBA)					
	Land Use	Daytime	Evening	Night		
Multifamily Residences - SW	Residential	1.0	1.0	1.0		
Estimated	Equipment		Spec	Actual	Receptor	
	Impact	Usage	Lmax	Lmax	Distance	
Shielding Description	Device	(%)	(dBA)	(dBA)	(feet)	(dBA)
Crane	No	16		80.6	230.0	
0.0						
All Other Equipment > 5 HP	No	50	85.0		230.0	
0.0						



Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/21/2022  
 Case Description: Townes at Orange\_Paving

\*\*\*\* Receptor #1 \*\*\*\*

Description	Baselines (dBA)				Receptor	(dBA)
	Land Use	Daytime	Evening	Night		
Single-Family Residences - NW	Residential	1.0	1.0	1.0		
Equipment						
Estimated	Impact	Usage	Spec Lmax	Actual Lmax	Distance	
Shielding Description	Device	(%)	(dBA)	(dBA)	(feet)	
All Other Equipment > 5 HP	No	50	85.0		190.0	
0.0 Paver	No	50		77.2	190.0	
0.0 Pavement Scarifier	No	20		89.5	190.0	
0.0 Roller	No	20		80.0	190.0	
0.0 Tractor	No	40	84.0		190.0	

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Equipment	Calculated (dBA)				Day		Evening	
	Night		Day		Night		Evening	
Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
All Other Equipment > 5 HP	N/A	N/A	73.4	70.4	N/A	N/A	N/A	N/A
0.0 Paver	N/A	N/A	65.6	62.6	N/A	N/A	N/A	N/A



All Other Equipment > 5 HP	73.2	70.2	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	65.4	62.4	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	77.7	70.7	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	68.2	61.2	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	72.2	68.2	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	75.0	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #3 \*\*\*\*

Description	Baselines (dBA)		
	Land Use	Daytime	Evening Night
Multifamily Residences - SW	Residential	1.0	1.0 1.0

Estimated Shielding Description	Equipment		Spec	Actual	Receptor	(dBA)
	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	
All Other Equipment > 5 HP 0.0	No	50	85.0		230.0	
Paver 0.0	No	50		77.2	230.0	
Pavement Scarafier 0.0	No	20		89.5	230.0	
Roller 0.0	No	20		80.0	230.0	
Tractor 0.0	No	40	84.0		230.0	

Results

Noise Limit Exceedance (dBA)      Noise Limits (dBA)

Calculated (dBA)	Day	Evening
------------------	-----	---------



Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/21/2022  
 Case Description: Townes at Orange\_Architectural Coating

\*\*\*\* Receptor #1 \*\*\*\*

Description	Baselines (dBA)			
	Land Use	Daytime	Evening	Night
Single-Family Residences - NW	Residential	1.0	1.0	1.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	190.0	0.0

Results

Equipment	Noise Limits (dBA)								
	Noise Limit Exceedance (dBA)				Noise Limits (dBA)				
	Day		Calculated (dBA) Evening		Day Night		Evening		Lmax
Leq	Lmax	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Compressor (air)			66.1	62.1	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Total	66.1	62.1	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*\*\*\* Receptor #2 \*\*\*\*

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Church - W	Residential	1.0	1.0	1.0

Equipment

Spec	Actual	Receptor	Estimated
------	--------	----------	-----------





