
APPENDIX 4.6
Noise Modeling Data



Google Earth



1000

feet

500

meters

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/3/2017

Case Description: El Dorado Hills Site Prep

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Regal Cine	Residential	51.4	51.4	51.4

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Impact Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Dozer	No	40		81.7	220	9
Dozer	No	40		81.7	220	9
Dozer	No	40		81.7	220	9
Tractor	No	40	84		220	9
Tractor	No	40	84		220	9
Tractor	No	40	84		220	9
Tractor	No	40	84		220	9

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
				Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Dozer	59.8	55.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	59.8	55.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	59.8	55.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	62.1	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	
Tractor	62.1	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	
Tractor	62.1	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	
Tractor	62.1	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	
Total	62.1	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	

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Holiday Inr	Residential	51.4	51.4	51.4

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Impact Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Dozer	No	40		81.7	430	6
Dozer	No	40		81.7	430	6
Dozer	No	40		81.7	430	6
Tractor	No	40	84		430	6
Tractor	No	40	84		430	6
Tractor	No	40	84		430	6
Tractor	No	40	84		430	6

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
				Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Dozer	57	53	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	57	53	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	57	53	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	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	59.3	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Lakehills Cr	Residential	51.4	51.4	51.4

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Impact Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)

Dozer	No	40		81.7	900	18
Dozer	No	40		81.7	900	18
Dozer	No	40		81.7	900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night	Day	Evening		Night		
			Lmax	Leq	Lmax	Leq	Lmax		Leq	Lmax	Leq		
Dozer	38.6	34.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	38.6	34.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	38.6	34.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	40.9	44.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Baselines (dBA)

Descriptor Land Use	Daytime	Evening	Night
El Dorado Residential	51.4	51.4	51.4

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Dozer	No	40		81.7	900	18
Dozer	No	40		81.7	900	18
Dozer	No	40		81.7	900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night	Day	Evening		Night		
			Lmax	Leq	Lmax	Leq	Lmax		Leq	Lmax	Leq		
Dozer	38.6	34.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	38.6	34.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	38.6	34.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	40.9	44.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Baselines (dBA)

Descriptor Land Use	Daytime	Evening	Night
Sound Level Residential	51.4	51.4	51.4

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Dozer	No	40		81.7	50	0
Dozer	No	40		81.7	50	0
Dozer	No	40		81.7	50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night	Day	Evening		Night		
			Lmax	Leq	Lmax	Leq	Lmax		Leq	Lmax	Leq		
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	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	N/A	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84	80	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	84	80	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	84	80	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	84	80	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	84	87.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/3/2017

Case Description: El Dorado Hills Grading

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Regal Cine	Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	220	9
Grader	No	40	85		220	9
Dozer	No	40		81.7	220	9
Tractor	No	40	84		220	9
Tractor	No	40	84		220	9
Tractor	No	40	84		220	9

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Excavator	58.8	54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	63.1	59.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	59.8	55.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	62.1	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
Tractor	62.1	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
Tractor	62.1	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
Total	63.1	65.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Holiday Inn	Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	430	6
Grader	No	40	85		430	6
Dozer	No	40		81.7	430	6
Tractor	No	40	84		430	6
Tractor	No	40	84		430	6
Tractor	No	40	84		430	6

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Excavator	56	52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	60.3	56.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	57	53	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	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.3	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Lakehills Ct	Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	900	18
Grader	No	40	85		900	18
Dozer	No	40		81.7	900	18
Tractor	No	40	84		900	18

Tractor	No	40	84	900	18
Tractor	No	40	84	900	18

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)					Noise Limit Exceedance (dBA)						
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	37.6	33.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	41.9	37.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	38.6	34.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	41.9	44.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Baselines (dBA)

Descriptor Land Use	Daytime	Evening	Night
El Dorado Residential	51.4	51.4	51.4

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	900	18
Grader	No	40	85		900	18
Dozer	No	40		81.7	900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)					Noise Limit Exceedance (dBA)						
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Excavator	37.6	33.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Grader	41.9	37.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	38.6	34.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	41.9	44.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Baselines (dBA)

Descriptor Land Use	Daytime	Evening	Night
Sound Level Residential	51.4	51.4	51.4

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	50	0
Grader	No	40	85		50	0
Dozer	No	40		81.7	50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)					Noise Limit Exceedance (dBA)						
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Grader	85	81	N/A	N/A	N/A	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	85	87.3	N/A	N/A	N/A	N/A	N/A	N/A	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: 5/3/2017

Case Description: El Dorado Hills Building Construction

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Regal Cine	Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Crane	No	16		80.6	220	9
Man Lift	No	20		74.7	220	9
Man Lift	No	20		74.7	220	9
Man Lift	No	20		74.7	220	9
Generator	No	50		80.6	220	9
Tractor	No	40	84		220	9
Tractor	No	40	84		220	9
Tractor	No	40	84		220	9
Welder / Torch	No	40		74	220	9

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day Lmax	Evening Leq	Night Leq	Day Lmax	Evening Leq	Night Lmax	Leq	
Crane	58.7	50.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Man Lift	52.8	45.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Man Lift	52.8	45.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Man Lift	52.8	45.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Generator	58.8	55.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	62.1	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	62.1	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	62.1	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Welder / Torch	52.1	48.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	62.1	64.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Holiday Inn	Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Crane	No	16		80.6	430	6
Man Lift	No	20		74.7	430	6
Man Lift	No	20		74.7	430	6
Man Lift	No	20		74.7	430	6
Generator	No	50		80.6	430	6
Tractor	No	40	84		430	6
Tractor	No	40	84		430	6
Tractor	No	40	84		430	6
Welder / Torch	No	40		74	430	6

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
	*Lmax	Leq	Day Lmax	Evening Leq	Night Leq	Day Lmax	Evening Leq	Night Lmax	Leq	
Crane	55.9	47.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Man Lift	50	43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Man Lift	50	43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Man Lift	50	43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Generator	55.9	52.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Welder / Torch	49.3	45.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	59.3	61.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Lakehills Cr Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	900	18
Man Lift	No	20		74.7	900	18
Man Lift	No	20		74.7	900	18
Man Lift	No	20		74.7	900	18
Generator	No	50		80.6	900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Welder / Torch	No	40		74	900	18

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	37.4	29.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	31.6	24.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	31.6	24.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	31.6	24.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	37.5	34.5	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	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	30.9	26.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	40.9	43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
El Dorado I Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	900	18
Man Lift	No	20		74.7	900	18
Man Lift	No	20		74.7	900	18
Man Lift	No	20		74.7	900	18
Generator	No	50		80.6	900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Tractor	No	40	84		900	18
Welder / Torch	No	40		74	900	18

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	37.4	29.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	31.6	24.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	31.6	24.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	31.6	24.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	37.5	34.5	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	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	30.9	26.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	40.9	43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Sound Level Residential	51.4	51.4	51.4

Equipment			
Spec	Actual	Receptor	Estimated

Description	Impact Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)	
Crane	No	16			80.6	50	0
Man Lift	No	20			74.7	50	0
Man Lift	No	20			74.7	50	0
Man Lift	No	20			74.7	50	0
Generator	No	50			80.6	50	0
Tractor	No	40	84			50	0
Tractor	No	40	84			50	0
Tractor	No	40	84			50	0
Welder / Torch	No	40			74	50	0

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Day	Evening	Night	Day	Evening	Night	Leq	Lmax	Leq	Lmax	Leq	
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84	80	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	84	80	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	84	80	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	74	70	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	84	86.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/3/2017

Case Description: El Dorado Hills Paving

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Regal Cine	Residential	51.4	51.4	51.4

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	220	9
Concrete Mixer Truck	No	40		78.8	220	9
Paver	No	50		77.2	220	9
Paver	No	50		77.2	220	9
Paver	No	50		77.2	220	9
Roller	No	20		80	220	9
Roller	No	20		80	220	9
Tractor	No	40	84		220	9

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Concrete Mixer Truck	56.9		53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	56.9		53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	55.4	52.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	55.4	52.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	55.4	52.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	58.1	51.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	58.1	51.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	62.1	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
Total	62.1	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Holiday Inn	Residential	51.4	51.4	51.4

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	430	6
Concrete Mixer Truck	No	40		78.8	430	6
Paver	No	50		77.2	430	6
Paver	No	50		77.2	430	6
Paver	No	50		77.2	430	6
Roller	No	20		80	430	6
Roller	No	20		80	430	6
Tractor	No	40	84		430	6

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Concrete Mixer Truck	54.1	50.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	54.1	50.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	52.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	52.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	52.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	55.3	48.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	55.3	48.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	59.3	59.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Lakehills Ct	Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	900	18
Concrete Mixer Truck	No	40		78.8	900	18
Paver	No	50		77.2	900	18
Paver	No	50		77.2	900	18
Paver	No	50		77.2	900	18
Roller	No	20		80	900	18
Roller	No	20		80	900	18
Tractor	No	40	84		900	18

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	35.7	31.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	35.7	31.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	34.1	31.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	34.1	31.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	34.1	31.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	36.9	29.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	36.9	29.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	40.9	41.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Baselines (dBA)			
Descriptor Land Use	Daytime	Evening	Night
El Dorado Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	900	18
Concrete Mixer Truck	No	40		78.8	900	18
Paver	No	50		77.2	900	18
Paver	No	50		77.2	900	18
Paver	No	50		77.2	900	18
Roller	No	20		80	900	18
Roller	No	20		80	900	18
Tractor	No	40	84		900	18

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	35.7	31.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	35.7	31.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	34.1	31.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	34.1	31.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	34.1	31.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	36.9	29.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	36.9	29.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	40.9	36.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	40.9	41.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Baselines (dBA)			
Descriptor Land Use	Daytime	Evening	Night
Sound Level Residential	51.4	51.4	51.4

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	50	0
Concrete Mixer Truck	No	40		78.8	50	0
Paver	No	50		77.2	50	0
Paver	No	50		77.2	50	0
Paver	No	50		77.2	50	0
Roller	No	20		80	50	0

Roller	No	20		80	50	0
Tractor	No	40	84		50	0

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)						
	*Lmax	Leq	Day	Leq	Evening	Night	Day	Evening	Night	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80	73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80	73	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	84	80	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	84	84.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	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: 5/3/2017

Case Description: El Dorado Hills Architectural Coating

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Regal Cine	Residential	51.4	51.4	51.4

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	220	9

		Results				Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
Equipment	Calculated (dBA)	Day		Evening		Night		Day		Evening		Night	
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	55.8	51.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	55.8	51.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Holiday Inn	Residential	51.4	51.4	51.4

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	430	6

		Results				Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
Equipment	Calculated (dBA)	Day		Evening		Night		Day		Evening		Night	
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Lakehills Ct	Residential	51.4	51.4	51.4

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	900	18

		Results				Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
Equipment	Calculated (dBA)	Day		Evening		Night		Day		Evening		Night	
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	34.6	30.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	34.6	30.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
El Dorado Hills	Residential	51.4	51.4	51.4

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	900	18

		Results				Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
Equipment	Calculated (dBA)	Day		Evening		Night		Day		Evening		Night	

Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	34.6	30.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	34.6	30.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Baselines (dBA)

Descriptor Land Use	Daytime	Evening	Night
Sound Level Residential	51.4	51.4	51.4

Equipment

Description	Impact Device	Usage(%)	Equipment	Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)		
Compressor (air)	No	40	77.7	50	0

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Lmax	Leq	Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq			Lmax	Leq		
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

El Dorado Hills Construction

Site Preparation Noise - Unmitigated

Reference Noise Distance

50

Reference Noise Level (RCNM)

87.6

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (RCNM)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Regal Cinemas	220	9	65.7	51.4	65.9	14.5
Holiday Inn Express	430	6	62.9	51.4	63.2	11.8
Lakehills Covenant Church	900	18	44.5	51.4	52.2	0.8
El Dorado Hills Kindercare	900	18	44.5	51.4	52.2	0.8

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

For Regal Cinemas an additional 3 dBA was given for a partial noise barrier (FHWA, RCNM User's Guide, 2006)

El Dorado Hills Construction

Grading Noise - Unmitigated

Reference Noise Distance

50

Reference Noise Level (RCNM)

87.3

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Regal Cinemas	220	9	65.4	51.4	65.6	14.2
Holiday Inn Express	430	6	62.6	51.4	62.9	11.5
Lakehills Covenant Church	900	18	44.2	51.4	52.2	0.8
El Dorado Hills Kindercare	900	18	44.2	51.4	52.2	0.8

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

For Regal Cinemas an additional 3 dBA was given for a partial noise barrier (FHWA, RCNM User's Guide, 2006)

El Dorado Hills Construction

Building Construction Noise - Unmitigated

Reference Noise Distance

50

Reference Noise Level (RCNM)

86.1

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (RCNM)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Regal Cinemas	220	9	64.2	51.4	64.5	13.1
Holiday Inn Express	430	6	61.4	51.4	61.8	10.4
Lakehills Covenant Church	900	18	43.0	51.4	52.0	0.6
El Dorado Hills Kindercare	900	18	43.0	51.4	52.0	0.6

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

For Regal Cinemas an additional 3 dBA was given for a partial noise barrier (FHWA, RCNM User's Guide, 2006)

El Dorado Hills Construction

Paving Noise - Unmitigated

Reference Noise Distance

50

Reference Noise Level (RCNM)

84.5

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (RCNM)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Regal Cinemas	220	9	62.6	51.4	62.9	11.5
Holiday Inn Express	430	6	59.8	51.4	60.4	9.0
Lakehills Covenant Church	900	18	41.4	51.4	51.8	0.4
El Dorado Hills Kindercare	900	18	41.4	51.4	51.8	0.4

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

For Regal Cinemas an additional 3 dBA was given for a partial noise barrier (FHWA, RCNM User's Guide, 2006)

El Dorado Hills Construction

Architectural Coating

Reference Noise Distance

50

Reference Noise Level (RCNM)

77.7

Sensitive Receptor	Distance (feet)	Mitigation Factor	Maximum Construction Noise Level (RCNM)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Regal Cinemas	220	9	55.8	51.4	57.2	5.8
Holiday Inn Express	430	6	53.0	51.4	55.3	3.9
Lakehills Covenant Church	900	18	34.6	51.4	51.5	0.1
El Dorado Hills Kindercare	900	18	34.6	51.4	51.5	0.1

A 3 dBA reduction was given for mufflers.

A 6 dBA attenuation is included for hard ground surface, and 3 dBA reduction is given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

For Regal Cinemas an additional 3 dBA was given for a partial noise barrier (FHWA, RCNM User's Guide, 2006)

For Lakehills Covenant Church an additional 15 dBA was given for an obstruction that completely breaks the line-of-site with the noise source (Ibid.)

El Dorado Hills Stationary HVAC Noise

Reference Noise Distance

100

Reference Noise Level

45

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Regal Cinemas	220	9	29.2	51.4	51.4	0.0
Holiday Inn Express	430	6	26.3	51.4	51.4	0.0
Lakehills Covenant Church	900	18	7.9	51.4	51.4	0.0
El Dorado Hills Kindercare	900	18	7.9	51.4	51.4	0.0

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

For Regal Cinemas an additional 3 dBA was given for a partial noise barrier (FHWA, RCNM User's Guide, 2006)

For Lakehills Covenant Church an additional 15 dBA was given for an obstruction that completely breaks the line-of-site with the noise source (Ibid.)

For El Dorado Hills Kindercare an additional 15 dBA was given for an obstruction that completely breaks the line-of-site with the noise source (Ibid.)

El Dorado Hills Parking Noise

Reference Noise Distance

50

Reference Noise Level

70

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Parking Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Regal Cinemas	220	9	48.1	51.4	53.1	1.7
Holiday Inn Express	430	6	45.3	51.4	52.4	1.0
Lakehills Covenant Church	900	18	26.9	51.4	51.4	0.0
El Dorado Hills Kindercare	900	18	26.9	51.4	51.4	0.0

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

For Regal Cinemas an additional 3 dBA was given for a partial noise barrier (FHWA, RCNM User's Guide, 2006)

For Lakehills Covenant Church an additional 15 dBA was given for an obstruction that completely breaks the line-of-site with the noise source (Ibid.)

For El Dorado Hills Kindercare an additional 15 dBA was given for an obstruction that completely breaks the line-of-site with the noise source (Ibid.)

El Dorado Hills Cumulative On-Site Operational Noise (HVAC & Parking)

Reference Noise Distance -

Reference Noise Level (Maximum noise levels combined from HVAC and Parking Worksheets)

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Combined Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Regal Cinemas	220	9	48.2	51.4	53.1	1.7
Holiday Inn Express	430	6	45.4	51.4	52.4	1.0
Lakehills Covenant Church	900	18	26.9	51.4	51.4	0.0
El Dorado Hills Kindercare	900	18	26.9	51.4	51.4	0.0

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

For Regal Cinemas an additional 3 dBA was given for a partial noise barrier (FHWA, RCNM User's Guide, 2006)

For Lakehills Covenant Church an additional 15 dBA was given for an obstruction that completely breaks the line-of-site with the noise source (Ibid.)

For El Dorado Hills Kindercare an additional 15 dBA was given for an obstruction that completely breaks the line-of-site with the noise source (Ibid.)

El Dorado Hills Mobile Noise

2017 Existing Conditions

ROAD SEGMENT			TOT.	VEHICLE TYPE %								Speed	Adt (Avg AM+PM *10)	dBA (from TNM)
	from:	to:	# VEH.	Auto	Auto	MT	MT	HT	HT					
			AM	%	%	%	%	%	%					
Town Center Boulevard	Post Street	East	199	487	97	333	2	7	1	3	25	3430	52.2	
Latrobe Road	White Rock Road	South	2125	2103	97	2051	2	42	1	21	45	21140	67.7	
White Rock Road	Post Street	Valley View Pkwy	1039	1323	97	1146	2	24	1	12	45	11810	66.6	
Valley View Pkwy	White Rock Road	South	496	554	97	509	2	11	1	5	45	5250	61.6	
Silva Valley Pkwy	US50	North	1136	1398	97	1229	2	25	1	13	45	12670	63.8	

Existing Plus Project

ROAD SEGMENT			TOT.	VEHICLE TYPE %								Speed	Adt	dBA (from TNM)	Increase from Existing
	from:	to:	# VEH.	Auto	Auto	MT	MT	HT	HT						
			AM	%	%	%	%	%	%						
Town Center Boulevard	Post Street	East	246	531	97	377	2	8	1	4	25	3885	54.9	2.7	
Latrobe Road	White Rock Road	South	2138	2117	97	2064	2	43	1	21	45	21275	67.7	0	
White Rock Road	Post Street	Valley View Pkwy	1072	1358	97	1179	2	24	1	12	45	12150	67.3	0.7	
Valley View Pkwy	White Rock Road	South	505	563	97	518	2	11	1	5	45	5340	62	0.4	
Silva Valley Pkwy	US50	North	1147	1409	97	1240	2	26	1	13	45	12780	64.3	0.5	

Future No Project

ROAD SEGMENT			TOT.	VEHICLE TYPE %								Speed	Adt	dBA (from TNM)
	from:	to:	# VEH.	Auto	Auto	MT	MT	HT	HT					
			AM	%	%	%	%	%	%					
Town Center Boulevard	Post Street	East	254	522	97	376	2	8	1	4	25	3880	55	
Latrobe Road	White Rock Road	South	3038	2960	97	2909	2	60	1	30	45	29990	69.1	
White Rock Road	Post Street	Valley View Pkwy	1613	1894	97	1700	2	35	1	18	45	17530	68.9	
Valley View Pkwy	White Rock Road	South	616	800	97	687	2	14	1	7	45	7080	63.2	
Silva Valley Pkwy	US50	North	2497	2258	97	2306	2	48	1	24	45	23775	67	

Future Plus Proposed Project

ROAD SEGMENT			TOT.	VEHICLE TYPE %								Speed	Adt	dBA (from TNM)	Increase from Base
	from:	to:	# VEH.	Auto	Auto	MT	MT	HT	HT						
			AM	%	%	%	%	%	%						
Town Center Boulevard	Post Street	East	298	564	97	418	2	9	1	4	25	4310	55.4	0.4	
Latrobe Road	White Rock Road	South	3050	2970	97	2920	2	60	1	30	45	30100	69.2	0.1	
White Rock Road	Post Street	Valley View Pkwy	1644	1924	97	1730	2	36	1	18	45	17835	69	0.1	
Valley View Pkwy	White Rock Road	South	630	810	97	698	2	14	1	7	45	7200	63.3	0.1	
Silva Valley Pkwy	US50	North	2510	2270	97	2318	2	48	1	24	45	23900	67	0	

Traffic mix from 2014 Noise Report (J.C. Brennan & Associates, Inc, *Environmental Noise Analysis El Dorado Hills Apartments*, 2014), table 4.

Impact Sciences
jjerome

5-May-17
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: El Dorado Hills
RUN: Existing Conditions
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing Ldn	No Barrier Ldn		Increase over existing		Type Impact	With Barrier		Calculated Noise Reduction Goal	Calculated minus Goal
			Calculated	Calculated	Crit'n	Calculated	Crit'n		Calculated	Calculated		
			dB	dB	dB	dB	dB			dB	dB	dB
Town Center from Post East	1	1	0	52.2	66	52.2	10	----	52.2	0	8	-8
Latrobe from White Rock South	3	1	0	67.7	66	67.7	10	Snd Lvl	67.7	0	8	-8
White Rock from Post to Valley	5	1	0	66.6	66	66.6	10	Snd Lvl	66.6	0	8	-8
Valley View from White Rock S	6	1	0	61.6	66	61.6	10	----	61.6	0	8	-8
Silva Valley from 50 North	8	1	0	63.8	66	63.8	10	----	63.8	0	8	-8

Dwelling Units	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	5	0	0	0
All Impacted	2	0	0	0
All that meet NR Goal	0	0	0	0

Impact Sciences
jjerome

8-May-17
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

RUN:

BARRIER DESIGN:

ATMOSPHERICS:

El Dorado Hills
Existing Plus Project
INPUT HEIGHTS

68 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver
Name

Receiver Name	No.	#DUs	Existing	No Barrier		Increase over existing		Type	With Barrier		Calculated Noise Reduction Goal	Calculated minus Goal
			Ldn	Ldn	Crit'n	Calculated	Crit'n	Impact	Ldn	Calculated		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Town Center from Post East	1	1	0	54.9	66	54.9	10	----	54.9	0	8	-8
Latrobe from White Rock South	3	1	0	67.7	66	67.7	10	Snd Lvl	67.7	0	8	-8
White Rock from Post to Valley View	5	1	0	67.3	66	67.3	10	Snd Lvl	67.3	0	8	-8
Valley View from White Rock South	6	1	0	62	66	62	10	----	62	0	8	-8
Silva Valley from 50 North	8	1	0	64.3	66	64.3	10	----	64.3	0	8	-8

Dwelling Units

	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	5	0	0	0
All Impacted	2	0	0	0
All that meet NR Goal	0	0	0	0

Impact Sciences
jjerome

8-May-17
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

RUN:

BARRIER DESIGN:

ATMOSPHERICS:

El Dorado Hills
Future No Project
INPUT HEIGHTS

68 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver
Name

Receiver Name	No.	#DUs	Existing	No Barrier	Increase over existing			With Barrier			Calculated minus Goal	
			Ldn	Ldn	Calculated	Crit'n	Type	Calculated	Noise Reduction	Calculated		
			dBA	dBA	dBA	dB	dB	Impact	dBA	dB	dB	dB
Town Center from Post East	1	1	0	55	66	55	10	----	55	0	8	-8
Latrobe from White Rock South	3	1	0	69.1	66	69.1	10	Snd Lvl	69.1	0	8	-8
White Rock from Post to Valley View	5	1	0	68.9	66	68.9	10	Snd Lvl	68.9	0	8	-8
Valley View from White Rock South	6	1	0	63.2	66	63.2	10	----	63.2	0	8	-8
Silva Valley from 50 North	8	1	0	67	66	67	10	Snd Lvl	67	0	8	-8

Dwelling Units

	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	5	0	0	0
All Impacted	3	0	0	0
All that meet NR Goal	0	0	0	0

Impact Sciences
jjerome

8-May-17
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

RUN:

BARRIER DESIGN:

ATMOSPHERICS:

El Dorado Hills
Future Plus Project
INPUT HEIGHTS

68 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver
Name

Receiver Name	No.	#DUs	Existing	No Barrier		Increase over existing		Type	With Barrier		Calculated Noise Reduction Goal	Calculated minus Goal
			Ldn	Ldn	Crit'n	Calculated	Crit'n	Impact	Ldn	Calculated		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Town Center from Post East	1	1	0	55.4	66	55.4	10	----	55.4	0	8	-8
Latrobe from White Rock South	3	1	0	69.2	66	69.2	10	Snd Lvl	69.2	0	8	-8
White Rock from Post to Valley View	5	1	0	69	66	69	10	Snd Lvl	69	0	8	-8
Valley View from White Rock South	6	1	0	63.3	66	63.3	10	----	63.3	0	8	-8
Silva Valley from 50 North	8	1	0	67	66	67	10	Snd Lvl	67	0	8	-8

Dwelling Units

	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	5	0	0	0
All Impacted	3	0	0	0
All that meet NR Goal	0	0	0	0