

Parenthetical Roadway Construction Noise Model (RCNM)
FHWA-HEP-05-054 (Software Version 1.00) Assumptions
For: Buck Gully Canyon Project
Date: October 2008

Surrounding Receptors

Direction	Distance (feet)	Use
North	140	Residential
South	132	Residential
East	145	Residential
West	80	Residential

Phase 1 - Fine Grading

Equipment:

Quantity	Type
1	Grader
1	Dozer
1	Tractor
1	Trucks

Roadway Construction Noise Model (RCNM), Version 1.0

Report date: 10/8/2008

Case Desc Buck Gully Canyon

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
North	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec	Actual		
			Lmax (dBA)	Lmax (dBA)		
Grader	No	40	85		140	0
Dozer	No	40		81.7	140	0
Tractor	No	40	84		140	0
Pickup Truck	No	40		75	140	0

Results

[illegible]

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
South	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec	Actual		
			Lmax (dBA)	Lmax (dBA)		
Grader	No	40	85		132	0
Dozer	No	40		81.7	132	0
Tractor	No	40	84		132	0
Pickup Truck	No	40		75	132	0

Results

[illegible]

Grader	76.6	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
Dozer	73.2	69.3	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	75.6	71.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	66.6	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
Total	76.6	76.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
East	Residential	1	1	1			
					Equipment		
					Spec	Actual	Receptor
					Lmax	Lmax	Distance
Description	Impact Device	Usage(%)	(dBA)	(dBA)	(feet)	Shielding (dBA)	
Grader	No	40	85		145	0	
Dozer	No	40		81.7	145	0	
Tractor	No	40	84		145	0	
Pickup Truck	No	40		75	145	0	

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
Grader		75.8	71.8	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		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
Tractor		74.8	70.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		75.8	75.5	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.

---- Receptor #4 ----

		Baselines (dBA)						
Description	Land Use	Daytime	Evening	Night				
West	Residential	1	1	1				
					Equipment			
					Spec	Actual	Receptor	Estimated
		Impact	Usage(%)	Lmax	Lmax	Distance	Shielding	
Description	Device			(dBA)	(dBA)	(feet)	(dBA)	
Grader	No		40		85		80	0
Dozer	No		40			81.7	80	0
Tractor	No		40		84		80	0
Pickup Truck	No		40			75	80	0

Results

Calculated (dBA)	Noise Limits (dBA)	Noise Limit Exceedance (dBA)
------------------	--------------------	------------------------------

Equipment	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	80.9	76.9	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	77.6	73.6	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	79.9	75.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	70.9	66.9	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	80.9	80.7	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.