APPENDIX 4.8

NOISE

Noise Modeling Data

Table N-2
NOISE LEVEL CONTOURS - Existing Weekday Off-Site ADT Volumes

ROADWAY NAME Segment	Land Use	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor (1)	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	 Heavy Trucks	dB(A) CNEL
Pedrick Road	Commercial	2	15	2,680	25	65	0	0	4.1%	37.7%	67.2
Interstate 80	Commercial	6	46	121,000	55	96	0	0	3.1%	3.6%	78.6
Change with Project											#NUM!
Pedrick Road	Commercial	2	15	2,680	25	65	0	0	4.1%	37.7%	67.2
Interstate 80	Commercial	6	46	135,300	55	96	0	0	3.1%	3.6%	79.1
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(1) Alpha Factor: Coefficient of absorption relating to the effects of the ground surface. An alpha factor of 0 indicates that the site is an acoustically "hard" site such as aspalt. An alpha factor of 0.5 indicates that the site is an acoustically "soft" site such as vegetative ground cover.

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%

Table 4.8-7 Calculations

Existing (2005) ADT

Pedrick		
	160	NB
	197	SB
Total:	357	
ADT	3570	
Axels	% of Total	
Truck Breakdown		
3,4	4.1	
5+	37.7	

I-80		
ADT	121000	Source: Carolyn Cole
Truck Breakdown		
Axels		% of Total
2,3,4	3724	3.08%
5+	4407	3.64%

2025 w/o Project ADT

Pedrick		
	2210	SB
	585	
	150	
	975	NB
	290	
	1930	
Total:	6140	
ADT	61400	
Axels	% of Total	
Truck Breakdown		
3,4	4.1	
5+	37.7	

I-80		
ADT	135300	Source: Carolyn Cole
Truck Breakdown		
Axels		% of Total
2,3,4	3724	3.08%
5+	4407	3.64%

2025 w Project ADT

Pedrick		
	3	SB
	68	
	3	
	107	NB
	114	
	71	
Total:	366	
Proj ADT	3660	
2005 ADT	61400	
Total ADT	65060	
Truck Breakdown		
Axels	% of Total	
3,4	4.1	
5+	37.7	

I-80		
ADT	135300	Source: Carolyn Cole
Truck Breakdown		
Axels		% of Total
2,3,4	3724	3.08%
5+	4407	3.64%