

**Appendix G:  
Noise Supporting Information**

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### Mobile Construction Activity Noise Calculation

Receptor: Receiving residential land use		Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements									
No.	Equipment Description	Reference (dBA) 50 ft	Quantity	Usage factor[1]	Distance to Receptor	Ground Effect[2]	Shielding (dBA)[3]	Calculated (dBA)		Energy	
		Lmax						Lmax	Leq		
1	Grader	85	1	40	30	1	3	86.4	84.7	293498739.3	
2	Excavator	85	1	40	80	1	3	77.9	71.9	15477472.58	
3	Dozer	85	1	40	80	1	3	77.9	71.9	15477472.58	
4	Front End Loader	80	1	40	130	1	3	68.7	60.6	1140617.282	
5	Backhoe	80	1	40	130	1	3	68.7	60.6	1140617.282	
6											
7											
8											
9											
10											
								Lmax[4]	86	Leq	85

Notes:

[1] Percentage of time activity occurs each hour

[2] Soft ground terrain between project site and receptor.

[3] Shielding due to terrain or structures

[4] Calculated Lmax is the Loudest value.

### Residential Grade Mechanical Equipment

Receptor: Nearest Residential Receptor		Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements									
No.	Equipment Description	Reference (dBA) 3 ft	Quantity	Usage factor[1]	Distance to Receptor	Ground Effect[2]	Shielding (dBA)[3]	Calculated (dBA)		Energy	
		Lmax						Lmax	Leq		
1	Residential grade mechanical ventilation equipment	70	1	80	60	1	0	44.0	30.0	1000	
2	Residential grade mechanical ventilation equipment	70	1	80	110	1	0	38.7	22.1	162.283997	
3	Residential grade mechanical ventilation equipment	70	1	80	160	1	0	35.5	17.2	52.734375	
4	Residential grade mechanical ventilation equipment	70	1	80	210	1	0	33.1	13.7	23.32361516	
5											
6											
7											
8											
9											
10											
								<b>Lmax[4]</b>	<b>44</b>	<b>Leq</b>	<b>31</b>

Notes:

- [1] Percentage of time activity occurs each hour
- [2] Soft ground terrain between project site and receptor.
- [3] Shielding due to structural/soundwall shielding
- [4] Calculated Lmax is the Loudest value.