

Pode Hall Quarry - Western Extension
Calculated Noise Levels from Infilling Operations

19-Nov-2019

Receptor: 38/39 Willow Hall Cottages Uses BS5228
 Height 6.5 m
 Grid Ref: 525275 X 302648 Y

Predicted Freefield Noise Levels

	Ref Level @10m	No.	% On Time	Grid Reference		Source Ht	Dist S-R	Barrier Ht	Dist S-B	Distance Attenuation		Barrier Attenuation	Max Attenuation	LAeq [dB]	Total LAeq [dB]
				X	Y					Hard	Soft				
Phase 1															
Dozer	78.0	LAeq 1	100	524850	302469	6	460	8	30	-33.3	-39.6	-8.7	-42.0	36.0	
HGV Movements	48.1	LAeq 12	-	525335	302785	6	150	8	30	-23.5	-27.4	-8.8	-32.4	35.4	38.7
Phase 2															
Dozer	78.0	LAeq 1	100	525007	302686	6	270	8	30	-28.6	-33.8	-8.8	-37.4	40.6	
HGV Movements	47.5	LAeq 12	-	525335	302785	6	150	8	30	-23.5	-27.4	-8.8	-32.4	34.8	41.6
Phase 3 (Closest)															
Dozer	78.0	LAeq 1	100	525195	302702	6	100	8	30	-20.0	-23.0	-9.0	-29.0	49.0	
HGV Movements	47.0	LAeq 12	-	525335	302785	6	150	8	30	-23.5	-27.4	-8.8	-32.4	34.3	49.2
Phase 3 (Min Distance to Achieve 48 dB LAeq limit)															
Dozer	78.0	LAeq 1	100	525165	302702	6	130	8	60	-22.3	-25.8	-8.2	-30.5	47.5	
HGV Movements	47.0	LAeq 12	-	525335	302785	6	150	8	30	-23.5	-27.4	-8.8	-32.4	34.3	47.7

Moving Point Sources

	Ref SWL	No. Veh per hour	Speed [km/h]	Dist to Centre of Haul Road	AOV	LAeq [dB]
HGV Movements (Phase 1)	106	12	25	150	180	48.1
HGV Movements (Phase 2)	106	12	25	150	160	47.5
HGV Movements (Phase 3)	106	12	25	150	140	47.0