

Noise Assessment Report - Southern Interchange Community Agreement - Rev 2, Night

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Created by: [redacted]

1. Introduction

This report presents a noise assessment of southern interchange community agreement - rev 2 construction activity which is proposed to occur during the night period (RMS CNVG OOHW2). This report presents the proposed activities, noise prediction results, an assessment against RMS CN requirements and details proposed noise management and mitigation measures.

2. Method

NoiseCheck is a 'front-end' 3-D noise prediction platform which adopts a database of predictions that are generated in third party proprietary software which conforms to ISO9613 Acoustics - Attenuation of Sound During Propagation Outdoors - Part 2: General Method of Calculation implemented to ISO/TR 17534-3:2015 requirements. The predictions consider source to receiver distance and height and the noise attenuation provided by ground and air absorption, topography, surrounding buildings and other solid objects and permanent noise barriers (where applicable). The typical height of plant and equipment is 2m. The noise predictions at surrounding single and double storey properties apply at 1.5m at the most affected facade. Predictions for apartment buildings with greater than two storeys apply at the worst affected floor and facade. This assessment presents the maximum LAeq noise level from all activities.

3. Works description

The work activities that have been assessed are shown in Figure 1. Details of the activities are provided in Table 1. All noise levels referenced are in dBA, Leq,15minutes.

Figure 1. Location of modelled plant and equipment

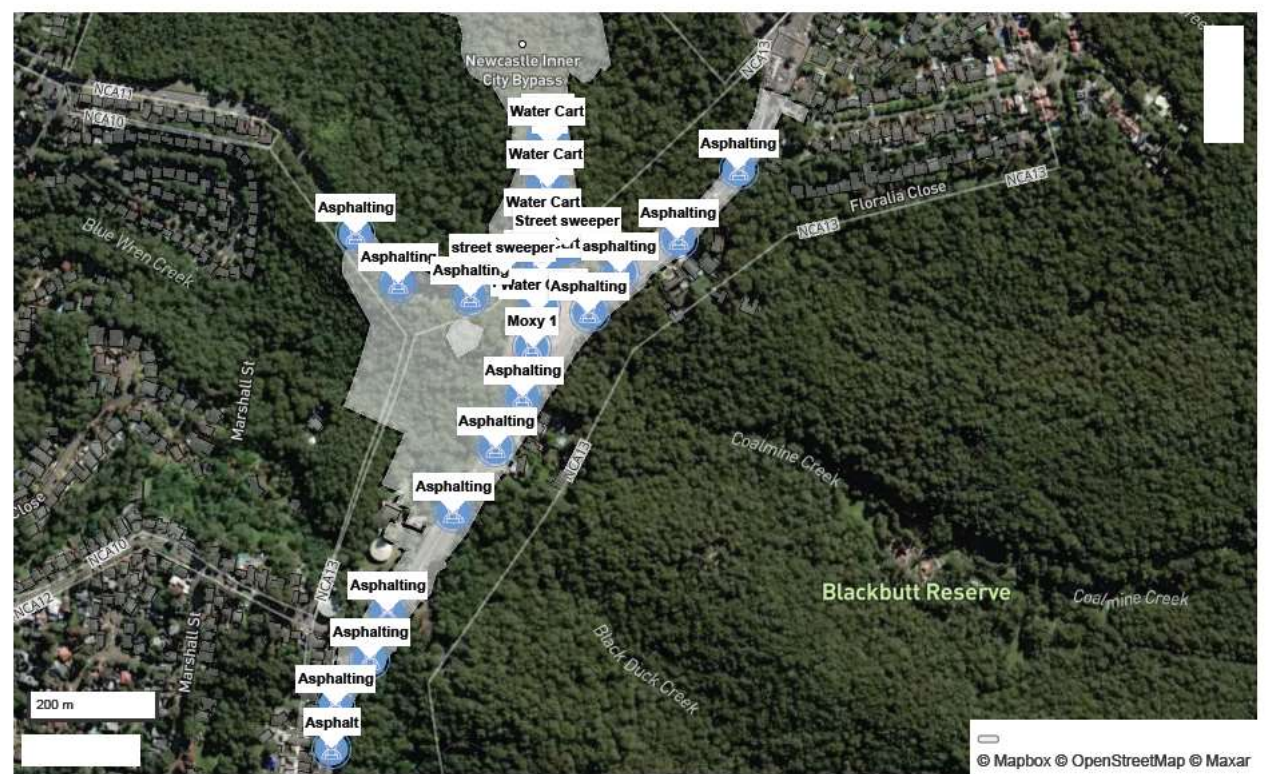


Table 1. Summary of modelled plant and equipment

Name	Duration	List of equipment	Sound power	Annoyance	Mitigation	Mitigation	Notes
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			level	penalty	reduction	
Haul load out	100%	Tracked Excavator	116 dBA	0	0 dBA	Load out of stockpiled material
Haul	80%	Compactor	105 dBA	0	0 dBA	
Moxy 1	15%	Dump truck	102 dBA	0	0 dBA	
Moxy 2	30%	Dump truck	105 dBA	0	0 dBA	
Moxy 4	20%	Dump truck	103 dBA	0	0 dBA	
Moxy 5	30%	Dump truck	105 dBA	0	0 dBA	
Water Cart	20%	Water cart	100 dBA	0	0 dBA	
Water Cart	20%	Water cart	100 dBA	0	0 dBA	
Water Cart	20%	Water cart	100 dBA	0	0 dBA	
Water Cart	20%	Water cart	100 dBA	0	0 dBA	
Water Cart	20%	Water cart	100 dBA	0	0 dBA	
Street sweeper	50%	Road Sweeper	107 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalt	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
Asphalting	33%	Asphalt	112 dBA	0	0 dBA	
street sweeper	50%	Road Sweeper	107 dBA	0	0 dBA	

4. Results

OOHW2

Based on the activities detailed above, noise levels above the NMLs have been predicted at several properties. The number of properties which exceed the NML for each land use surrounding the site are provided in the table below.

Table 2. Summary of predicted potential impacts at all surrounding land uses

Land use	Noticeable N	Clearly audible V, N, R2, DR	Moderately intrusive V, IB, N, PC, SN, R2, DR	Highly intrusive AA, V, IB, N, PC, SN, R2, DR
Residential	299	275	28	13
Educational Facility	0	1	0	0

Figure 2 provides map of all surrounding properties which have predicted noise levels above NML and additional mitigation measures. The details of these properties are also shown in Table 3. All noise levels referenced are in dBA, Leq,15minutes.

Figure 2. Map of predicted potential impacts at surrounding land uses





Table 3. Identified properties with predicted noise levels above NML ☒ Noticeable ☒ Clearly audible ☒ Moderately intrusive ☒ Highly intrusive

ID	Land use	Address	NCA	NML	Prediction	NML exceedance	RMS CNVG assessment category	Additional mitigation	Notes
2316	Residential		9	35	37	2	Noticeable	N	
2318	Residential		9	35	36	1	Noticeable	N	
2325	Residential		9	35	37	2	Noticeable	N	
2322	Residential		9	35	37	2	Noticeable	N	
2320	Residential		9	35	39	4	Noticeable	N	
2324	Residential		9	35	37	2	Noticeable	N	
2323	Residential		9	35	38	3	Noticeable	N	
2319	Residential		9	35	36	1	Noticeable	N	
2326	Residential		9	35	37	2	Noticeable	N	
2335	Residential		9	35	38	3	Noticeable	N	
2336	Residential		9	35	38	3	Noticeable	N	
2343	Residential		9	35	37	2	Noticeable	N	
2339	Residential		9	35	38	3	Noticeable	N	
2342	Residential		9	35	36	1	Noticeable	N	
2344	Residential		9	35	36	1	Noticeable	N	
2348	Residential		9	35	37	2	Noticeable	N	
2353	Residential		9	35	37	2	Noticeable	N	
2352	Residential		9	35	39	4	Noticeable	N	
2350	Residential		9	35	36	1	Noticeable	N	
2349	Residential		9	35	38	3	Noticeable	N	
2355	Residential		9	35	38	3	Noticeable	N	
2358	Residential		9	35	37	2	Noticeable	N	
2356	Residential		9	35	38	3	Noticeable	N	
2362	Residential		9	35	38	3	Noticeable	N	

2359	Residential		9	35	38	3	Noticeable	N
2361	Residential		9	35	37	2	Noticeable	N
2373	Residential		9	35	38	3	Noticeable	N
2375	Residential		9	35	38	3	Noticeable	N
2374	Residential		9	35	37	2	Noticeable	N
2369	Residential		9	35	37	2	Noticeable	N
2380	Residential		9	35	37	2	Noticeable	N
2378	Residential		9	35	40	5	Noticeable	N
2383	Residential		9	35	38	3	Noticeable	N
2393	Residential		9	35	39	4	Noticeable	N
2392	Residential		9	35	36	1	Noticeable	N
2388	Residential		9	35	38	3	Noticeable	N
2395	Residential		9	35	38	3	Noticeable	N
2394	Residential		9	35	38	3	Noticeable	N
2397	Residential		9	35	39	4	Noticeable	N
2401	Residential		9	35	36	1	Noticeable	N
2403	Residential		9	35	39	4	Noticeable	N
2400	Residential		9	35	37	2	Noticeable	N
2404	Residential		9	35	38	3	Noticeable	N
2405	Residential		9	35	36	1	Noticeable	N
2409	Residential		9	35	38	3	Noticeable	N
2406	Residential		9	35	36	1	Noticeable	N
2413	Residential		9	35	37	2	Noticeable	N
2414	Residential		9	35	38	3	Noticeable	N
2415	Residential		9	35	38	3	Noticeable	N
2411	Residential		9	35	38	3	Noticeable	N
2412	Residential		9	35	36	1	Noticeable	N
2410	Residential		9	35	37	2	Noticeable	N
2416	Residential		9	35	38	3	Noticeable	N
2419	Residential		9	35	39	4	Noticeable	N
2423	Residential		9	35	38	3	Noticeable	N
2425	Residential		9	35	39	4	Noticeable	N
2427	Residential		9	35	38	3	Noticeable	N
2434	Residential		9	35	37	2	Noticeable	N
2435	Residential		9	35	40	5	Noticeable	N
2436	Residential		9	35	37	2	Noticeable	N
2439	Residential		9	35	36	1	Noticeable	N
2437	Residential		9	35	37	2	Noticeable	N

2443	Residential		9	35	36	1	Noticeable	N
2438	Residential		9	35	36	1	Noticeable	N
2451	Residential		9	35	36	1	Noticeable	N
2450	Residential		9	35	40	5	Noticeable	N
2453	Residential		9	35	40	5	Noticeable	N
2448	Residential		9	35	36	1	Noticeable	N
2449	Residential		9	35	37	2	Noticeable	N
2454	Residential		9	35	37	2	Noticeable	N
2455	Residential		9	35	37	2	Noticeable	N
2456	Residential		9	35	39	4	Noticeable	N
2457	Residential		9	35	36	1	Noticeable	N
2459	Residential		9	35	42	7	Clearly audible	V, N, R2, DR
2460	Residential		9	35	36	1	Noticeable	N
2462	Residential		9	35	36	1	Noticeable	N
2463	Residential		9	35	40	5	Noticeable	N
2467	Residential		9	35	36	1	Noticeable	N
2466	Residential		9	35	36	1	Noticeable	N
2469	Residential		9	35	39	4	Noticeable	N
2464	Residential		9	35	36	1	Noticeable	N
2465	Residential		9	35	38	3	Noticeable	N
2471	Residential		9	35	40	5	Noticeable	N
2470	Residential		9	35	40	5	Noticeable	N
2472	Residential		9	35	37	2	Noticeable	N
2474	Residential		9	35	39	4	Noticeable	N
2479	Residential		9	35	39	4	Noticeable	N
2477	Residential		9	35	37	2	Noticeable	N
2476	Residential		9	35	36	1	Noticeable	N
2478	Residential		9	35	37	2	Noticeable	N
2481	Residential		9	35	36	1	Noticeable	N
2483	Residential		9	35	36	1	Noticeable	N
2485	Residential		9	35	39	4	Noticeable	N
2487	Residential		9	35	37	2	Noticeable	N
2484	Residential		9	35	37	2	Noticeable	N
2486	Residential		9	35	37	2	Noticeable	N
2488	Residential		9	35	37	2	Noticeable	N
2491	Residential		9	35	40	5	Noticeable	N
2490	Residential		9	35	38	3	Noticeable	N
2495	Residential		9	35	37	2	Noticeable	N
2494	Residential		9	35	40	5	Noticeable	N

2492	Residential		9	35	40	5	Noticeable	N
2493	Residential		9	35	38	3	Noticeable	N
2499	Residential		9	35	41	6	Clearly audible	V, N, R2, DR
2501	Residential		9	35	38	3	Noticeable	N
2496	Residential		9	35	38	3	Noticeable	N
2500	Residential		9	35	38	3	Noticeable	N
2497	Residential		9	35	40	5	Noticeable	N
2503	Residential		9	35	41	6	Clearly audible	V, N, R2, DR
2506	Residential		9	35	38	3	Noticeable	N
2504	Residential		9	35	37	2	Noticeable	N
2511	Residential		9	35	40	5	Noticeable	N
2509	Residential		9	35	38	3	Noticeable	N
2508	Residential		9	35	38	3	Noticeable	N
2512	Residential		9	35	37	2	Noticeable	N
2510	Residential		9	35	37	2	Noticeable	N
2515	Residential		9	35	39	4	Noticeable	N
2514	Residential		9	35	38	3	Noticeable	N
2520	Residential		9	35	38	3	Noticeable	N
2519	Residential		9	35	37	2	Noticeable	N
2518	Residential		9	35	38	3	Noticeable	N
2522	Residential		9	35	37	2	Noticeable	N
2523	Residential		9	35	42	7	Clearly audible	V, N, R2, DR
2517	Residential		9	35	38	3	Noticeable	N
2516	Residential		9	35	37	2	Noticeable	N
2524	Residential		13	38	39	1	Noticeable	N
2529	Residential		9	35	39	4	Noticeable	N
2531	Residential		9	35	38	3	Noticeable	N
2527	Residential		9	35	41	6	Clearly audible	V, N, R2, DR
2525	Residential		9	35	38	3	Noticeable	N
2530	Residential		13	38	40	2	Noticeable	N
2528	Residential		9	35	37	2	Noticeable	N
2526	Residential		13	38	40	2	Noticeable	N
2533	Residential		9	35	40	5	Noticeable	N
2532	Residential		9	35	42	7	Clearly audible	V, N, R2, DR
2538	Residential		9	35	42	7	Clearly audible	V, N, R2, DR
2539	Residential		9	35	38	3	Noticeable	N
2540	Residential		9	35	38	3	Noticeable	N

2536	Residential		9	33	36	3	Noticeable	**
2534	Residential		13	38	40	2	Noticeable	N
2543	Residential		9	35	38	3	Noticeable	N
2541	Residential		13	38	40	2	Noticeable	N
2545	Residential		9	35	39	4	Noticeable	N
2544	Residential		9	35	41	6	Clearly audible	V, N, R2, DR
2547	Residential		13	38	41	3	Noticeable	N
2546	Residential		13	38	40	2	Noticeable	N
2552	Residential		13	38	41	3	Noticeable	N
2551	Residential		9	35	39	4	Noticeable	N
2548	Residential		9	35	37	2	Noticeable	N
2549	Residential		9	35	38	3	Noticeable	N
2553	Residential		9	35	39	4	Noticeable	N
2555	Residential		9	35	39	4	Noticeable	N
2556	Residential		13	38	39	1	Noticeable	N
2554	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
2557	Residential		9	35	39	4	Noticeable	N
2558	Residential		9	35	39	4	Noticeable	N
2559	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
2560	Residential		9	35	39	4	Noticeable	N
2561	Residential		14	40	50	10	Clearly audible	V, N, R2, DR
2562	Residential		9	35	39	4	Noticeable	N
2564	Residential		9	35	39	4	Noticeable	N
2566	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
2568	Residential		9	35	40	5	Noticeable	N
2571	Residential		9	35	38	3	Noticeable	N
2572	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
2573	Residential		9	35	39	4	Noticeable	N
2575	Residential		9	35	40	5	Noticeable	N
2576	Residential		13	38	46	8	Clearly audible	V, N, R2, DR
2580	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
2581	Residential		9	35	37	2	Noticeable	N
2583	Residential		13	38	43	5	Noticeable	N
2588	Residential		13	38	41	3	Noticeable	N
				38	40	2		N

2586	Residential		13	35	38	3	Noticeable	
2585	Residential		9	35	38	3	Noticeable	N
2591	Residential		13	38	43	5	Noticeable	N
2590	Residential		9	35	39	4	Noticeable	N
2589	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
2594	Residential		13	38	40	2	Noticeable	N
2599	Residential		9	35	40	5	Noticeable	N
2596	Residential		13	38	47	9	Clearly audible	V, N, R2, DR
2601	Residential		13	38	39	1	Noticeable	N
2597	Residential		9	35	40	5	Noticeable	N
2602	Residential		13	38	41	3	Noticeable	N
2607	Residential		13	38	40	2	Noticeable	N
2612	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
2614	Residential		13	38	46	8	Clearly audible	V, N, R2, DR
2621	Residential		11	38	42	4	Noticeable	N
2615	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
2619	Residential		13	38	41	3	Noticeable	N
2618	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
2616	Residential		11	38	42	4	Noticeable	N
2617	Residential		11	38	41	3	Noticeable	N
2622	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
2624	Residential		11	38	46	8	Clearly audible	V, N, R2, DR
2625	Residential		11	38	46	8	Clearly audible	V, N, R2, DR
2626	Residential		11	38	44	6	Clearly audible	V, N, R2, DR
2627	Residential		11	38	44	6	Clearly audible	V, N, R2, DR
2629	Residential		11	38	44	6	Clearly audible	V, N, R2, DR
2628	Residential		13	38	42	4	Noticeable	N
2630	Residential		11	38	44	6	Clearly audible	V, N, R2, DR
2633	Residential		11	38	45	7	Clearly audible	V, N, R2, DR
2632	Residential		11	38	48	10	Clearly audible	V, N, R2, DR
2631	Residential		13	38	42	4	Noticeable	N
2634	Residential		13	38	42	4	Noticeable	N
2638	Residential		11	38	47	9	Clearly audible	V, N, R2, DR
2635	Residential		11	38	46	8	Clearly audible	V, N, R2, DR

2642	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
2637	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2640	Residential		11	38	47	9	Clearly audible	V, N, R2, DR
2636	Residential		13	38	43	5	Noticeable	N
2641	Residential		13	38	46	8	Clearly audible	V, N, R2, DR
2639	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2643	Residential		13	38	43	5	Noticeable	N
2646	Residential		13	38	40	2	Noticeable	N
2644	Residential		11	38	51	13	Clearly audible	V, N, R2, DR
2649	Residential		11	38	47	9	Clearly audible	V, N, R2, DR
2648	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
2647	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2645	Residential		13	38	39	1	Noticeable	N
2653	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2652	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2651	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2654	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2657	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2655	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
2656	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2661	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2660	Residential		11	38	49	11	Clearly audible	V, N, R2, DR
2658	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2659	Residential		13	38	41	3	Noticeable	N
2663	Residential		13	38	46	8	Clearly audible	V, N, R2, DR
2662	Residential		13	38	48	10	Clearly audible	V, N, R2, DR
2664	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2671	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2669	Residential		13	38	42	4	Noticeable	N
2667	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2668	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2666	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2670	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2665	Residential		13	38	43	5	Noticeable	N

2672	Residential		13	38	40	2	Noticeable	N
2673	Residential		13	38	42	4	Noticeable	N
2674	Residential		10	35	49	14	Clearly audible	V, N, R2, DR
2677	Residential		13	38	40	2	Noticeable	N
2679	Residential		13	38	40	2	Noticeable	N
2675	Residential		13	38	55	17	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2676	Residential		13	38	42	4	Noticeable	N
2680	Residential		13	38	42	4	Noticeable	N
2678	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
2682	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2681	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2683	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2687	Residential		13	38	43	5	Noticeable	N
2688	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2686	Residential		10	35	48	13	Clearly audible	V, N, R2, DR
2690	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2684	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2689	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2685	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2692	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2691	Residential		13	38	40	2	Noticeable	N
2693	Residential		13	38	40	2	Noticeable	N
2698	Residential		13	38	42	4	Noticeable	N
2700	Residential		13	38	41	3	Noticeable	N
2699	Residential		13	38	40	2	Noticeable	N
2694	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2697	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2695	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2696	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2703	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2702	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2701	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2704	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2706	Residential		10	35	45	10	Clearly audible	V, N, R2, DR

2705	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2712	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2708	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2707	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2711	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2709	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2710	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2713	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2714	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2716	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2715	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2721	Residential		13	38	59	21	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2722	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2718	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2719	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2717	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2723	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2720	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2724	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2725	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2734	Residential		13	38	49	11	Clearly audible	V, N, R2, DR
2727	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2731	Residential		13	38	60	22	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2736	Residential		13	38	51	13	Clearly audible	V, N, R2, DR
2729	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2726	Residential		13	38	61	23	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2730	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2728	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2739	Residential		13	38	48	10	Clearly audible	V, N, R2, DR
2748	Residential		13	38	67	29	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2750	Residential		13	38	52	14	Clearly audible	V, N, R2, DR
2746	Residential		13	38	66	28	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2747	Residential		13	38	67	29	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2749	Residential		13	38	72	34	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2737	Residential		13	38	45	7	Clearly audible	V, N, R2, DR

2751	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2753	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2752	Residential		13	38	62	24	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2755	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2756	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
2757	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
2758	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2762	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2763	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2764	Residential		10	35	47	12	Clearly audible	V, N, R2, DR
2761	Residential		10	35	46	11	Clearly audible	V, N, R2, DR
2760	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2759	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2765	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2770	Residential		12	35	46	11	Clearly audible	V, N, R2, DR
2766	Residential		12	35	47	12	Clearly audible	V, N, R2, DR
2772	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2771	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2773	Residential		10	35	50	15	Clearly audible	V, N, R2, DR
2767	Residential		12	35	45	10	Clearly audible	V, N, R2, DR
2768	Residential		10	35	48	13	Clearly audible	V, N, R2, DR
2769	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2774	Residential		12	35	46	11	Clearly audible	V, N, R2, DR
2778	Residential		10	35	50	15	Clearly audible	V, N, R2, DR
2777	Residential		10	35	50	15	Clearly audible	V, N, R2, DR
2775	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2776	Residential		10	35	49	14	Clearly audible	V, N, R2, DR
2780	Residential		12	35	45	10	Clearly audible	V, N, R2, DR
2783	Residential		10	35	42	7	Clearly audible	V, N, R2, DR

2784	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2782	Residential		10	35	48	13	Clearly audible	V, N, R2, DR
2781	Residential		10	35	49	14	Clearly audible	V, N, R2, DR
2779	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
2788	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2787	Residential		12	35	51	16	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2786	Residential		10	35	53	18	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2785	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
2790	Residential		10	35	57	22	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2789	Residential		12	35	46	11	Clearly audible	V, N, R2, DR
2791	Residential		10	35	39	4	Noticeable	N
2792	Residential		12	35	49	14	Clearly audible	V, N, R2, DR
2793	Residential		12	35	47	12	Clearly audible	V, N, R2, DR
2794	Residential		12	35	51	16	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2798	Residential		12	35	50	15	Clearly audible	V, N, R2, DR
2795	Residential		10	35	39	4	Noticeable	N
2797	Residential		10	35	40	5	Noticeable	N
2796	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2804	Residential		12	35	49	14	Clearly audible	V, N, R2, DR
2800	Residential		12	35	50	15	Clearly audible	V, N, R2, DR
2802	Residential		12	35	49	14	Clearly audible	V, N, R2, DR
2803	Residential		12	35	50	15	Clearly audible	V, N, R2, DR
2799	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
2801	Residential		12	35	47	12	Clearly audible	V, N, R2, DR
2805	Residential		12	35	49	14	Clearly audible	V, N, R2, DR
2806	Residential		12	35	50	15	Clearly audible	V, N, R2, DR
2808	Residential		12	35	46	11	Clearly audible	V, N, R2, DR
2809	Residential		12	35	54	19	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2810	Residential		12	35	55	20	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2812	Residential			38	60	22	Moderately	V, IB, N, PC,

			13				intrusive	SN, R2, DR
2807	Residential		12	35	47	12	Clearly audible	V, N, R2, DR
2813	Residential		12	35	48	13	Clearly audible	V, N, R2, DR
2811	Residential		12	35	49	14	Clearly audible	V, N, R2, DR
2814	Residential		12	35	47	12	Clearly audible	V, N, R2, DR
2815	Residential		12	35	52	17	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2816	Residential		12	35	49	14	Clearly audible	V, N, R2, DR
2820	Residential		13	38	65	27	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2817	Residential		13	38	63	25	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2818	Residential		12	35	51	16	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2819	Residential		12	35	48	13	Clearly audible	V, N, R2, DR
2822	Residential		13	38	65	27	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2821	Residential		12	35	51	16	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2823	Residential		13	38	68	30	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2824	Residential		13	38	67	29	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2825	Residential		12	35	51	16	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2829	Residential		13	38	67	29	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2828	Residential		12	35	50	15	Clearly audible	V, N, R2, DR
2833	Residential		13	38	71	33	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2834	Residential		13	38	67	29	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2832	Residential		12	35	60	25	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2827	Residential		12	35	56	21	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2826	Residential		13	38	72	34	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2830	Residential		12	35	51	16	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2831	Educational Facility		12	55	70	15	Clearly audible	V, N, R2, DR
2837	Residential		13	38	61	23	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2838	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2835	Residential		13	38	64	26	Highly intrusive	AA, V, IB, N, PC, SN, R2, DR
2836	Residential		12	35	44	9	Clearly audible	V, N, R2, DR

2844	Residential		12	35	39	4	Noticeable	N
2841	Residential		12	35	51	16	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2840	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2843	Residential		12	35	47	12	Clearly audible	V, N, R2, DR
2842	Residential		13	38	59	21	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2839	Residential		12	35	37	2	Noticeable	N
2846	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2845	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2847	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2849	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2854	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2848	Residential		13	38	57	19	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2850	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2852	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2853	Residential		12	35	45	10	Clearly audible	V, N, R2, DR
2851	Residential		13	38	52	14	Clearly audible	V, N, R2, DR
2860	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2859	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2858	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2856	Residential		12	35	37	2	Noticeable	N
2857	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2855	Residential		13	38	55	17	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2861	Residential		12	35	53	18	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2863	Residential		12	35	46	11	Clearly audible	V, N, R2, DR
2864	Residential		12	35	39	4	Noticeable	N
2873	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2869	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2870	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2872	Residential		13	38	52	14	Clearly audible	V, N, R2, DR
2871	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2868	Residential		13	38	55	17	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2865	Residential		12	35	43	8	Clearly audible	V, N, R2, DR

2866	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2875	Residential		12	35	48	13	Clearly audible	V, N, R2, DR
2876	Residential		12	35	36	1	Noticeable	N
2879	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2877	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2881	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2880	Residential		13	38	56	18	Moderately intrusive	V, IB, N, PC, SN, R2, DR
2878	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2882	Residential		12	35	38	3	Noticeable	N
2884	Residential		12	35	50	15	Clearly audible	V, N, R2, DR
2883	Residential		12	35	45	10	Clearly audible	V, N, R2, DR
2886	Residential		12	35	40	5	Noticeable	N
2887	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2885	Residential		13	38	53	15	Clearly audible	V, N, R2, DR
2888	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2890	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2889	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2894	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2891	Residential		12	35	38	3	Noticeable	N
2897	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2895	Residential		12	35	49	14	Clearly audible	V, N, R2, DR
2896	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2899	Residential		12	35	49	14	Clearly audible	V, N, R2, DR
2904	Residential		12	35	48	13	Clearly audible	V, N, R2, DR
2900	Residential		12	35	45	10	Clearly audible	V, N, R2, DR
2902	Residential		12	35	37	2	Noticeable	N
2901	Residential		12	35	40	5	Noticeable	N
2903	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2905	Residential		13	38	52	14	Clearly audible	V, N, R2, DR
2907	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2910	Residential		12	35	36	1	Noticeable	N
				35	47	12		V, N, R2, DR

2908	Residential		12				Clearly audible	
2914	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2909	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2912	Residential		13	38	53	15	Clearly audible	V, N, R2, DR
2911	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2913	Residential		12	35	37	2	Noticeable	N
2915	Residential		12	35	38	3	Noticeable	N
2917	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2922	Residential		12	35	38	3	Noticeable	N
2919	Residential		12	35	38	3	Noticeable	N
2920	Residential		12	35	39	4	Noticeable	N
2921	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2924	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2927	Residential		13	38	50	12	Clearly audible	V, N, R2, DR
2931	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2926	Residential		12	35	37	2	Noticeable	N
2928	Residential		12	35	44	9	Clearly audible	V, N, R2, DR
2932	Residential		12	35	40	5	Noticeable	N
2933	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2934	Residential		13	38	42	4	Noticeable	N
2938	Residential		12	35	42	7	Clearly audible	V, N, R2, DR
2941	Residential		13	38	47	9	Clearly audible	V, N, R2, DR
2936	Residential		12	35	39	4	Noticeable	N
2935	Residential		12	35	36	1	Noticeable	N
2940	Residential		12	35	40	5	Noticeable	N
2942	Residential		12	35	40	5	Noticeable	N
2944	Residential		12	35	39	4	Noticeable	N
2950	Residential		12	35	38	3	Noticeable	N
2945	Residential		12	35	36	1	Noticeable	N
2949	Residential		12	35	36	1	Noticeable	N
2947	Residential		12	35	36	1	Noticeable	N
2953	Residential		12	35	43	8	Clearly audible	V, N, R2, DR
2952	Residential		12	35	38	3	Noticeable	N

2951	Residential		12	35	38	3	Noticeable	N
2955	Residential		12	35	38	3	Noticeable	N
2957	Residential		12	35	39	4	Noticeable	N
2964	Residential		12	35	39	4	Noticeable	N
2962	Residential		12	35	37	2	Noticeable	N
2963	Residential		12	35	38	3	Noticeable	N
2967	Residential		12	35	39	4	Noticeable	N
2965	Residential		12	35	40	5	Noticeable	N
2966	Residential		12	35	36	1	Noticeable	N
2972	Residential		12	35	37	2	Noticeable	N
2970	Residential		12	35	36	1	Noticeable	N
2973	Residential		12	35	36	1	Noticeable	N
2974	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
2969	Residential		12	35	38	3	Noticeable	N
2971	Residential		12	35	39	4	Noticeable	N
2968	Residential		12	35	39	4	Noticeable	N
2976	Residential		12	35	37	2	Noticeable	N
2975	Residential		12	35	37	2	Noticeable	N
2978	Residential		12	35	40	5	Noticeable	N
2983	Residential		12	35	37	2	Noticeable	N
2979	Residential		13	38	46	8	Clearly audible	V, N, R2, DR
2980	Residential		12	35	37	2	Noticeable	N
2977	Residential		12	35	39	4	Noticeable	N
2990	Residential		12	35	36	1	Noticeable	N
2986	Residential		12	35	38	3	Noticeable	N
2987	Residential		12	35	37	2	Noticeable	N
2991	Residential		12	35	38	3	Noticeable	N
2992	Residential		12	35	38	3	Noticeable	N
2993	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
2994	Residential		13	38	47	9	Clearly audible	V, N, R2, DR
2995	Residential		12	35	38	3	Noticeable	N
3004	Residential		12	35	39	4	Noticeable	N
2997	Residential		13	38	47	9	Clearly audible	V, N, R2, DR
				35	38	3		N

3002	Residential		12	35	38	3	Noticeable	N
3003	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
2999	Residential		12	35	38	3	Noticeable	N
3006	Residential		12	35	41	6	Clearly audible	V, N, R2, DR
3014	Residential		12	35	39	4	Noticeable	N
3010	Residential		12	35	39	4	Noticeable	N
3011	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
3008	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
3013	Residential		12	35	39	4	Noticeable	N
3007	Residential		12	35	38	3	Noticeable	N
3016	Residential		13	38	43	5	Noticeable	N
3017	Residential		12	35	37	2	Noticeable	N
3021	Residential		12	35	38	3	Noticeable	N
3024	Residential		12	35	36	1	Noticeable	N
3023	Residential		12	35	38	3	Noticeable	N
3022	Residential		13	38	46	8	Clearly audible	V, N, R2, DR
3019	Residential		12	35	39	4	Noticeable	N
3018	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
3015	Residential		12	35	38	3	Noticeable	N
3034	Residential		12	35	37	2	Noticeable	N
3032	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
3027	Residential		13	38	44	6	Clearly audible	V, N, R2, DR
3029	Residential		12	35	38	3	Noticeable	N
3028	Residential		13	38	42	4	Noticeable	N
3026	Residential		13	38	45	7	Clearly audible	V, N, R2, DR
3031	Residential		12	35	36	1	Noticeable	N
3038	Residential		13	38	43	5	Noticeable	N
3036	Residential		13	38	43	5	Noticeable	N
3037	Residential		12	35	37	2	Noticeable	N
3043	Residential		13	38	39	1	Noticeable	N
3041	Residential		13	38	41	3	Noticeable	N

3042	Residential		13	38	41	3	Noticeable	N
3040	Residential		13	38	41	3	Noticeable	N
3045	Residential		13	38	42	4	Noticeable	N
3057	Residential		10	35	37	2	Noticeable	N
3055	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
3054	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
3052	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
3051	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
3056	Residential		10	35	39	4	Noticeable	N
3053	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3050	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
3059	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
3058	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
3060	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3061	Residential		10	35	42	7	Clearly audible	V, N, R2, DR
3064	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3067	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
3065	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3070	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3069	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
3076	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
3077	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
3075	Residential		10	35	39	4	Noticeable	N
3074	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
3073	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3072	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
3078	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
3081	Residential		10	35	48	13	Clearly audible	V, N, R2, DR
3079	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
3082	Residential		10	35	37	2	Noticeable	N
3080	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3083	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3086	Residential		10	35	39	4	Noticeable	N
3085	Residential		10	35	39	4	Noticeable	N
3084	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
3087	Residential		10	35	43	8	Clearly audible	V, N, R2, DR
3088	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
3089	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
				35	44	9		V, N, R2, DR

3091	Residential		10				Clearly audible	
3096	Residential		10	35	40	5	Noticeable	N
3094	Residential		10	35	40	5	Noticeable	N
3095	Residential		10	35	44	9	Clearly audible	V, N, R2, DR
3093	Residential		10	35	40	5	Noticeable	N
3090	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
3097	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
3092	Residential		10	35	41	6	Clearly audible	V, N, R2, DR
3098	Residential		10	35	39	4	Noticeable	N
3099	Residential		10	35	40	5	Noticeable	N
3102	Residential		10	35	38	3	Noticeable	N
3101	Residential		10	35	39	4	Noticeable	N
3106	Residential		10	35	45	10	Clearly audible	V, N, R2, DR
3104	Residential		10	35	40	5	Noticeable	N
3100	Residential		10	35	49	14	Clearly audible	V, N, R2, DR
3107	Residential		10	35	37	2	Noticeable	N
3108	Residential		10	35	39	4	Noticeable	N
3112	Residential		10	35	38	3	Noticeable	N
3110	Residential		10	35	38	3	Noticeable	N
3113	Residential		10	35	38	3	Noticeable	N
3109	Residential		10	35	39	4	Noticeable	N
3111	Residential		10	35	38	3	Noticeable	N