

Appendix I

Noise Measurement Field Sheets and Traffic Noise Calculations

Noise Measurement Field Data

Project:	Fairview at Northgate (Vallejo)	Job Number:	
Site No.:	#1	Date:	12/11/2018
Analyst:	Noemi Wyss	Time:	11:16 AM
Location:	Hunter Court		
Noise Sources:	Cars on Foothill/ Hunter Court, birds, people talking		
Comments:			
Results (dBA):			
	Leq:	Lmin:	Lmax:
	55.4	55.3	65.1
			Peak:
			91.4

Equipment	
Sound Level Meter:	SoundPro DL
Calibrator:	QC-10
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	46
Wind (mph):	6 mph
Sky:	Clear
Bar. Pressure:	30.22
Humidity:	89%

Photo:



Noise Measurement Field Data

Project:	Fairview at Northgate (Vallejo)		Job Number:	
Site No.:	#2		Date:	12/11/2018
Analyst:	Noemi Wyss		Time:	11:40 AM
Location:	Apartment Complex (Sundance Apartment Homes)			
Noise Sources:	People talking, some cars in parking lot, machinery			
Comments:	Someone came to talk to me around minute 9			
Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	56.0	55.3	79.8	80.1

Equipment	
Sound Level Meter:	SoundPro DL
Calibrator:	QC-10
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	48
Wind (mph):	5
Sky:	Clear
Bar. Pressure:	30.17
Humidity:	89%

Photo:



Noise Measurement Field Data

Project:	Fairview at Northgate (Vallejo)	Job Number:	
Site No.:	#3	Date:	12/11/2018
Analyst:	Noemi Wyss	Time:	12:20 PM
Location:	Turner Parkway and Admiral Callaghan Lane		
Noise Sources:	I-80, Turner, Callaghan --> constant vehicular noise		
Comments:			

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
67.3	60.1	75.9	98.6

Equipment	
Sound Level Meter:	SoundPro DL
Calibrator:	QC-10
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	50
Wind (mph):	6
Sky:	Clear
Bar. Pressure:	30.14
Humidity:	67%

Photo:



Noise Measurement Field Data

Project:	Fairview at Northgate (Vallejo)		Job Number:	
Site No.:	#4		Date:	12/11/2018
Analyst:	Noemi Wyss		Time:	12:42 PM
Location:	Rotary Street near Safeway/ commercial center			
Noise Sources:	Rotary, shopping center, I-80, Callaghan Lane			
Comments:				
Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	62.8	55.3	80.2	98.2

Equipment	
Sound Level Meter:	SoundPro DL
Calibrator:	QC-10
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	55
Wind (mph):	6
Sky:	Clear
Bar. Pressure:	30.14
Humidity:	67%

Photo:



FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Fairview at Northgate
Project Number: 097089103
Scenario: Existing
Ldn/CNEL: CNEL

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%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour			
											70 CNEL	65 CNEL	60 CNEL	55 CNEL
1	Admiral Callaghan Lane	Columbus Pkwy to Auto Club Dr	6	5	20,725	35	0	2.0%	1.0%	64.1	-	80	254	804
2	Admiral Callaghan Lane	Auto Club Dr to Plaza Dr	4	8	17,910	35	0	2.0%	1.0%	63.3	-	67	213	673
3	Admiral Callaghan Lane	Plaza Dr to Vallejo Corners	4	12	9,405	35	0	2.0%	1.0%	60.5	-	-	112	355
4	Admiral Callaghan Lane	Vallejo Corners to Target Driveway	4	12	11,400	35	0	2.0%	1.0%	61.3	-	-	136	431
5	Admiral Callaghan Lane	Target Driveway to Turner Parkway	4	12	11,520	35	0	2.0%	1.0%	61.4	-	-	138	435
6	Admiral Callaghan Lane	Turner Parkway to Rotary Way	2	2	16,680	35	0	2.0%	1.0%	62.9	-	61	194	613
7	Admiral Callaghan Lane	Rotary Way to I-80 Ramps	4	15	18,175	35	0	2.0%	1.0%	63.4	-	69	218	689
8	Plaza Drive	Admiral Callaghan Lane to Gateway Plaza	4	15	10,620	35	0	2.0%	1.0%	61.0	-	-	127	403
9	Plaza Drive	Gateway Plaza to Costco Driveway	4	15	7,070	35	0	2.0%	1.0%	59.3	-	-	85	268
10	Plaza Drive	Costco Driveway to Turner Parkway	4	15	10,280	35	0	2.0%	1.0%	60.9	-	-	123	390
11	Turner Parkway	Admiral Callaghan Lane to Plaza Drive	4	11	7,500	40	0	2.0%	1.0%	60.8	-	-	120	380
12	Redwood Parkway	West of Admiral Callaghan Lane	5	11	16,140	35	0	2.0%	1.0%	62.9	-	62	196	619
13	Redwood Parkway	East of Admiral Callaghan Lane	4	11	13,020	35	0	2.0%	1.0%	61.9	-	-	155	491

¹ Distance is from the centerline of the roadway segment to the receptor location.

"-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Fairview at Northgate
Project Number: 097089103
Scenario: Existing Plus Project
Ldn/CNEL: CNEL

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%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour			
											70 CNEL	65 CNEL	60 CNEL	55 CNEL
1	Admiral Callaghan Lane	Columbus Pkwy to Auto Club Dr	6	5	20,267	35	0	2.0%	1.0%	64.0	-	79	248	786
2	Admiral Callaghan Lane	Auto Club Dr to Plaza Dr	4	8	17,457	35	0	2.0%	1.0%	63.2	-	66	207	656
3	Admiral Callaghan Lane	Plaza Dr to Vallejo Corners	4	12	13,095	35	0	2.0%	1.0%	61.9	-	-	156	495
4	Admiral Callaghan Lane	Vallejo Corners to Target Driveway	4	12	15,090	35	0	2.0%	1.0%	62.6	-	57	180	570
5	Admiral Callaghan Lane	Target Driveway to Turner Parkway	4	12	15,210	35	0	2.0%	1.0%	62.6	-	57	182	574
6	Admiral Callaghan Lane	Turner Parkway to Rotary Way	2	2	23,755	35	0	2.0%	1.0%	64.4	-	87	276	873
7	Admiral Callaghan Lane	Rotary Way to I-80 Ramps	4	15	28,945	35	0	2.0%	1.0%	65.4	-	110	347	1,098
8	Plaza Drive	Admiral Callaghan Lane to Gateway Plaza	4	15	9,790	35	0	2.0%	1.0%	60.7	-	-	117	371
9	Plaza Drive	Gateway Plaza to Costco Driveway	4	15	7,472	35	0	2.0%	1.0%	59.5	-	-	90	283
10	Plaza Drive	Costco Driveway to Turner Parkway	4	15	9,360	35	0	2.0%	1.0%	60.5	-	-	112	355
11	Turner Parkway	Admiral Callaghan Lane to Plaza Drive	4	11	7,360	40	0	2.0%	1.0%	60.7	-	-	118	373
12	Redwood Parkway	West of Admiral Callaghan Lane	5	11	17,240	35	0	2.0%	1.0%	63.2	-	66	209	662
13	Redwood Parkway	East of Admiral Callaghan Lane	4	11	14,120	35	0	2.0%	1.0%	62.3	-	53	168	533

¹ Distance is from the centerline of the roadway segment to the receptor location.

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FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Fairview at Northgate
Project Number: 097089103
Scenario: Opening Year
Ldn/CNEL: CNEL

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%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour			
											70 CNEL	65 CNEL	60 CNEL	55 CNEL
1	Admiral Callaghan Lane	Columbus Pkwy to Auto Club Dr	6	5	21,550	35	0	2.0%	1.0%	64.2	-	84	264	836
2	Admiral Callaghan Lane	Auto Club Dr to Plaza Dr	4	8	18,550	35	0	2.0%	1.0%	63.4	-	70	220	697
3	Admiral Callaghan Lane	Plaza Dr to Vallejo Corners	4	12	9,915	35	0	2.0%	1.0%	60.7	-	-	118	374
4	Admiral Callaghan Lane	Vallejo Corners to Target Driveway	4	12	12,080	35	0	2.0%	1.0%	61.6	-	-	144	456
5	Admiral Callaghan Lane	Target Driveway to Turner Parkway	4	12	12,230	35	0	2.0%	1.0%	61.6	-	-	146	462
6	Admiral Callaghan Lane	Turner Parkway to Rotary Way	2	2	17,810	35	0	2.0%	1.0%	63.2	-	65	207	655
7	Admiral Callaghan Lane	Rotary Way to I-80 Ramps	4	15	19,735	35	0	2.0%	1.0%	63.7	-	75	237	748
8	Plaza Drive	Admiral Callaghan Lane to Gateway Plaza	4	15	10,700	35	0	2.0%	1.0%	61.1	-	-	128	406
9	Plaza Drive	Gateway Plaza to Costco Driveway	4	15	7,600	35	0	2.0%	1.0%	59.6	-	-	91	288
10	Plaza Drive	Costco Driveway to Turner Parkway	4	15	10,900	35	0	2.0%	1.0%	61.2	-	-	131	413
11	Turner Parkway	Admiral Callaghan Lane to Plaza Drive	4	11	7,980	40	0	2.0%	1.0%	61.1	-	-	128	404
12	Redwood Parkway	West of Admiral Callaghan Lane	5	11	17,280	35	0	2.0%	1.0%	63.2	-	66	210	663
13	Redwood Parkway	East of Admiral Callaghan Lane	4	11	13,770	35	0	2.0%	1.0%	62.2	-	52	164	519

¹ Distance is from the centerline of the roadway segment to the receptor location.

"-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Fairview at Northgate
Project Number: 097089103
Scenario: Opening Year Plus Project
Ldn/CNEL: CNEL

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%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour			
											70 CNEL	65 CNEL	60 CNEL	55 CNEL
1	Admiral Callaghan Lane	Columbus Pkwy to Auto Club Dr	6	5	21,092	35	0	2.0%	1.0%	64.1	-	82	259	818
2	Admiral Callaghan Lane	Auto Club Dr to Plaza Dr	4	8	18,097	35	0	2.0%	1.0%	63.3	-	68	215	680
3	Admiral Callaghan Lane	Plaza Dr to Vallejo Corners	4	12	13,605	35	0	2.0%	1.0%	62.1	-	51	162	514
4	Admiral Callaghan Lane	Vallejo Corners to Target Driveway	4	12	15,770	35	0	2.0%	1.0%	62.7	-	60	188	596
5	Admiral Callaghan Lane	Target Driveway to Turner Parkway	4	12	15,920	35	0	2.0%	1.0%	62.8	-	60	190	601
6	Admiral Callaghan Lane	Turner Parkway to Rotary Way	2	2	24,885	35	0	2.0%	1.0%	64.6	-	91	289	915
7	Admiral Callaghan Lane	Rotary Way to I-80 Ramps	4	15	30,505	35	0	2.0%	1.0%	65.6	-	116	366	1,157
8	Plaza Drive	Admiral Callaghan Lane to Gateway Plaza	4	15	10,375	35	0	2.0%	1.0%	60.9	-	-	124	393
9	Plaza Drive	Gateway Plaza to Costco Driveway	4	15	8,002	35	0	2.0%	1.0%	59.8	-	-	96	303
10	Plaza Drive	Costco Driveway to Turner Parkway	4	15	10,350	35	0	2.0%	1.0%	60.9	-	-	124	392
11	Turner Parkway	Admiral Callaghan Lane to Plaza Drive	4	11	7,840	40	0	2.0%	1.0%	61.0	-	-	126	397
12	Redwood Parkway	West of Admiral Callaghan Lane	5	11	18,380	35	0	2.0%	1.0%	63.5	-	71	223	705
13	Redwood Parkway	East of Admiral Callaghan Lane	4	11	14,870	35	0	2.0%	1.0%	62.5	-	56	177	561

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FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Fairview at Northgate
Project Number: 097089103
Scenario: Horizon Year
Ldn/CNEL: CNEL

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%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour			
											70 CNEL	65 CNEL	60 CNEL	55 CNEL
1	Admiral Callaghan Lane	Columbus Pkwy to Auto Club Dr	6	5	25,400	35	0	2.0%	1.0%	64.9	-	98	311	985
2	Admiral Callaghan Lane	Auto Club Dr to Plaza Dr	4	8	22,000	35	0	2.0%	1.0%	64.2	-	83	261	827
3	Admiral Callaghan Lane	Plaza Dr to Vallejo Corners	4	12	11,550	35	0	2.0%	1.0%	61.4	-	-	138	436
4	Admiral Callaghan Lane	Vallejo Corners to Target Driveway	4	12	14,000	35	0	2.0%	1.0%	62.2	-	53	167	529
5	Admiral Callaghan Lane	Target Driveway to Turner Parkway	4	12	14,200	35	0	2.0%	1.0%	62.3	-	54	170	536
6	Admiral Callaghan Lane	Turner Parkway to Rotary Way	2	2	20,500	35	0	2.0%	1.0%	63.8	-	75	238	753
7	Admiral Callaghan Lane	Rotary Way to I-80 Ramps	4	15	22,400	35	0	2.0%	1.0%	64.3	-	85	269	849
8	Plaza Drive	Admiral Callaghan Lane to Gateway Plaza	4	15	12,400	35	0	2.0%	1.0%	61.7	-	-	149	470
9	Plaza Drive	Gateway Plaza to Costco Driveway	4	15	8,700	35	0	2.0%	1.0%	60.2	-	-	104	330
10	Plaza Drive	Costco Driveway to Turner Parkway	4	15	12,600	35	0	2.0%	1.0%	61.8	-	-	151	478
11	Turner Parkway	Admiral Callaghan Lane to Plaza Drive	4	11	9,300	40	0	2.0%	1.0%	61.7	-	-	149	471
12	Redwood Parkway	West of Admiral Callaghan Lane	5	11	20,000	35	0	2.0%	1.0%	63.9	-	77	243	767
13	Redwood Parkway	East of Admiral Callaghan Lane	4	11	16,000	35	0	2.0%	1.0%	62.8	-	60	191	604

¹ Distance is from the centerline of the roadway segment to the receptor location.
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FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Fairview at Northgate
Project Number: 097089103
Scenario: Horizon Year Plus Project
Ldn/CNEL: CNEL

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%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour			
											70 CNEL	65 CNEL	60 CNEL	55 CNEL
1	Admiral Callaghan Lane	Columbus Pkwy to Auto Club Dr	6	5	27,102	35	0	2.0%	1.0%	65.2	-	105	332	1,051
2	Admiral Callaghan Lane	Auto Club Dr to Plaza Dr	4	8	23,702	35	0	2.0%	1.0%	64.5	-	89	282	891
3	Admiral Callaghan Lane	Plaza Dr to Vallejo Corners	4	12	15,240	35	0	2.0%	1.0%	62.6	-	58	182	576
4	Admiral Callaghan Lane	Vallejo Corners to Target Driveway	4	12	17,690	35	0	2.0%	1.0%	63.2	-	67	211	668
5	Admiral Callaghan Lane	Target Driveway to Turner Parkway	4	12	17,890	35	0	2.0%	1.0%	63.3	-	68	214	676
6	Admiral Callaghan Lane	Turner Parkway to Rotary Way	2	2	28,935	35	0	2.0%	1.0%	65.3	34	106	336	1,064
7	Admiral Callaghan Lane	Rotary Way to I-80 Ramps	4	15	34,530	35	0	2.0%	1.0%	66.2	-	131	414	1,309
8	Plaza Drive	Admiral Callaghan Lane to Gateway Plaza	4	15	13,670	35	0	2.0%	1.0%	62.1	-	52	164	518
9	Plaza Drive	Gateway Plaza to Costco Driveway	4	15	10,512	35	0	2.0%	1.0%	61.0	-	-	126	399
10	Plaza Drive	Costco Driveway to Turner Parkway	4	15	14,490	35	0	2.0%	1.0%	62.4	-	55	174	549
11	Turner Parkway	Admiral Callaghan Lane to Plaza Drive	4	11	10,520	40	0	2.0%	1.0%	62.3	-	53	168	533
12	Redwood Parkway	West of Admiral Callaghan Lane	5	11	21,470	35	0	2.0%	1.0%	64.2	-	82	261	824
13	Redwood Parkway	East of Admiral Callaghan Lane	4	11	17,470	35	0	2.0%	1.0%	63.2	-	66	208	659

¹ Distance is from the centerline of the roadway segment to the receptor location.
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