

Appendix G

Noise Modeling Data

Noise Appendix

Field Noise Measurement Data Sheets

FIELD NOISE MEASUREMENT DATA

PROJECT	COVINA HASSEN B1-B2		PROJECT #	8817.0006
SITE ID			OBSERVER(S)	PETE VITAR
SITE ADDRESS				
START DATE	10/2/18	END DATE	10/2/18	
START TIME		END TIME		

METEOROLOGICAL CONDITIONS

TEMP 76 F HUMIDITY 51 % R.H. WIND CALM LIGHT MODERATE
 WINDSPD _____ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
 SKY SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT PICCOLO SCM-P3 TYPE 1 (2) SERIAL # 14037004
 CALIBRATOR BSSWA CA 119 SERIAL # 480181
 CALIBRATION CHECK PRE-TEST _____ dBA SPL POST-TEST _____ dBA SPL WINDSCRN PES

SETTINGS A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

REC. # BEGIN END Leg Lmax Lmin L90 L50 L10 OTHER (SPECIFY METRIC)

M6

50-51	10:24	10:39	70.0	80.6	58.2				

COMMENTS

READING TAKEN AT 137 W. SAN BERNARDINO ROAD (CLOSED AUTO DEALERSHIP LOT).
 PRIMARY NOISE SOURCE IS TRAFFIC ON W. SAN BERNARDINO ROAD; SECONDARY IS
 CONSTRUCTION VEHICLES DRIVING AND IDLING ON CONSTRUCTION SIDE ACROSS
 STREET

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: _____
 ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR EOP: 40'
 TRAFFIC COUNT DURATION: 15 MIN SPEED _____ MIN SPEED _____

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB		SB/WB		IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	NB/EB		SB/WB	
		NB/EB	SB/WB	NB/EB	SB/WB			NB/EB	SB/WB		
AUTOS		167				✓					
MED TRKS		6									
HVY TRKS		4									
BUSES		0									
MOTRCLS		0									

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY: 30 MPH

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
 DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
 OTHER: _____

DESCRIPTION / SKETCH

TERRAIN HARD SOFT MIXED FLAT OTHER: _____

PHOTOS 2293; 2299; 2300; 2301; 2302; 2303; 2304; 2305

OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

PROJECT	COVINA HASSEN B1-B2		PROJECT #	8817.0006
SITE ID			OBSERVER(S)	PETE VITAR
SITE ADDRESS				
START DATE	10/2/18	END DATE	10/2/18	
START TIME		END TIME		

METEOROLOGICAL CONDITIONS

TEMP 76 F HUMIDITY 51 % R.H. WIND CALM LIGHT MODERATE
 WINDSPD _____ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
 SKY SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT PICCOLO SCM-P3 TYPE 1 (2) SERIAL # 14037004
 CALIBRATOR BSSWA CA 119 SERIAL # 480181
 CALIBRATION CHECK PRE-TEST _____ dBA SPL POST-TEST _____ dBA SPL WINDSCREEN PES

SETTINGS A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

REC. # BEGIN END Leg Lmax Lmin L90 L50 L10 OTHER (SPECIFY METRIC)

M7	S2-S3	10:45	11:00	66.5	85.8	53.5				

COMMENTS

READING TAKEN AT 137 W. SAN BERNARDINO ROAD (CLOSE TO DEALERSHIP LOT).
 PRIMARY NOISE SOURCE IS TRAFFIC ON CITRUS AVE. SECONDARY IS
 TRAFFIC ON W. SAN BERNARDINO RD & CONSTRUCTION VEHICLES IDLING ON
 CONSTRUCTION SITE ACROSS W. SAN BERNARDINO AVE

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
 ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR EOP: 40' FROM CITRUS AVE
 TRAFFIC COUNT DURATION: 15 MIN SPEED MIN 40' FASPEED W. SAN BERN. RD

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB		SB/WB		IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	NB/EB		SB/WB	
		NB/EB	SB/WB	NB/EB	SB/WB			NB/EB	SB/WB		
AUTOS		179				✓					
MED TRKS		3									
HVY TRKS		0									
BUSES		0									
MOTRCLS		0									

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY: 25 MPH SOUTH OF W. SAN BERNARDINO ROAD

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
 DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
 OTHER: _____

DESCRIPTION / SKETCH

TERRAIN HARD SOFT MIXED FLAT OTHER: _____

PHOTOS 2306; 2307; 2308; 2309; 2310; 2311

OTHER COMMENTS / SKETCH



FIELD NOISE MEASUREMENT DATA

PROJECT	COVINA HASSEN B1-B2		PROJECT #	8817.0006
SITE ID			OBSERVER(S)	PETE VITAR
SITE ADDRESS				
START DATE	10/2/13	END DATE	10/2/13	
START TIME		END TIME		

METEOROLOGICAL CONDITIONS

TEMP 76 F HUMIDITY 51 % R.H. WIND CALM LIGHT MODERATE
WINDSPD _____ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT PICCOLO SCM-P3 TYPE 1 (2) SERIAL # 14037004
CALIBRATOR BSSWA CA 119 SERIAL # 480157
CALIBRATION CHECK PRE-TEST _____ dBA SPL POST-TEST _____ dBA SPL WINDSCRN PES

SETTINGS A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
M8 54-55	11:06	11:21	62.7	81.6	53.2				

COMMENTS

READING TAKEN ON THIRD AVE, AT EACH CORNER OF PROPERTY AT 209 W. ZINFANDEL DR (RESIDENTIAL); NOISE SOURCE IS ~~THE~~ LIGHT TRAFFIC ON THIRD AVE & TRAFFIC ON NEARBY W. SAN BERNARDINO ROAD, ALSO CONSTRUCTION VEHICLES @ SITE ACROSS W. SAN BERNARDINO RD.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE		<u>TRAFFIC</u>		AIRCRAFT	RAIL	INDUSTRIAL	OTHER:			
ROADWAY TYPE:		<u>ASPHALT</u>		DIST. TO RDWY C/L OR EOP:		<u>10' (ON THIRD AVE)</u>				
TRAFFIC COUNT DURATION:		<u>15</u> MIN		SPEED		MIN SPEED				
COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS	<u>11</u>								
	MED TRKS	<u>0</u>								
	HVY TRKS	<u>0</u>								
	BUSES	<u>0</u>								
	MOTRCLS	<u>0</u>								

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: _____

DESCRIPTION / SKETCH

TERRAIN HARD SOFT MIXED FLAT OTHER: _____

PHOTOS 2312; 2313; 2314; 2315; 2316; 2317; 2318

OTHER COMMENTS / SKETCH



Construction Noise Model Input / Output

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/3/2018
Case Description: Hassen_Architectural Coating

		---- Receptor #1 ----						
Description	Land Use	Baselines (dBA)						
		Daytime	Evening	Night				
Nearest Receiver 60'	Residential	65	60	55				
		Equipment						
Description				Spec	Actual	Receptor	Estimated	
		Impact		Lmax	Lmax	Distance	Shielding	
		Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Compressor (air)		No	40		77.7	60	0	
		Results						
		Calculated (dBA)			Noise Limits (dBA)			
				Day	Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Compressor (air)		76.1	72.1	N/A	N/A	N/A	N/A	N/A
	Total	76.1	72.1	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.								

		---- Receptor #2 ----						
Description	Land Use	Baselines (dBA)						
		Daytime	Evening	Night				
Typical Receiver 200'	Residential	65	60	55				
		Equipment						
Description		Impact	Usage(%)	Spec	Actual	Receptor	Estimated	
				Lmax	Lmax	Distance	Shielding	
Compressor (air)		Device		(dBA)	(dBA)	(feet)	(dBA)	
		No	40		77.7	200	0	
		Results						
		Calculated (dBA)			Noise Limits (dBA)			
					Day	Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Compressor (air)		65.6	61.6	N/A	N/A	N/A	N/A	N/A
	Total	65.6	61.6	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.								

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/3/2018

Case Description: Hassen_Building Construction

		Baselines (dBA)			---- Receptor #1 ----			
Description	Land Use	Daytime	Evening	Night				
Nearest Receiver 60'	Residential	65	60	55				
		Equipment						
		Impact	Spec	Actual	Receptor	Estimated		
Description		Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)	
Crane		No	16		80.6	60	0	
Man Lift		No	20		74.7	60	0	
Generator		No	50		80.6	60	0	
Tractor		No	40	84		80	0	
Welder / Torch		No	40		74	80	0	
Welder / Torch		No	40		74	80	0	
Welder / Torch		No	40		74	100	0	
		Results						
		Calculated (dBA)		Noise Limits (dBA)				
				Day		Evening		Night
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Crane		79	71	N/A	N/A	N/A	N/A	N/A
Man Lift		73.1	66.1	N/A	N/A	N/A	N/A	N/A
Generator		79	76	N/A	N/A	N/A	N/A	N/A
Tractor		79.9	75.9	N/A	N/A	N/A	N/A	N/A
Welder / Torch		69.9	65.9	N/A	N/A	N/A	N/A	N/A
Welder / Torch		69.9	65.9	N/A	N/A	N/A	N/A	N/A
Welder / Torch		68	64	N/A	N/A	N/A	N/A	N/A
	Total	79.9	80.3	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.								

---- Receptor #2 ----							
Description	Land Use	Baselines (dBA)					
		Daytime	Evening	Night			
Typical Receiver 200'	Residential	65	60	55			
Equipment							
Description	Impact	Device	Usage(%)	Spec	Actual	Receptor	Estimated
				Lmax	Lmax	Distance	Shielding
				(dBA)	(dBA)	(feet)	(dBA)
Crane	No		16		80.6	200	0
Man Lift	No		20		74.7	200	0
Generator	No		50		80.6	200	0
Tractor	No		40	84		200	0
Welder / Torch	No		40		74	200	0

Welder / Torch	No	40	74	200	0
Welder / Torch	No	40	74	200	0

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
			Day			Evening	Night
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Crane	68.5	60.6	N/A	N/A	N/A	N/A	N/A
Man Lift	62.7	55.7	N/A	N/A	N/A	N/A	N/A
Generator	68.6	65.6	N/A	N/A	N/A	N/A	N/A
Tractor	72	68	N/A	N/A	N/A	N/A	N/A
Welder / Torch	62	58	N/A	N/A	N/A	N/A	N/A
Welder / Torch	62	58	N/A	N/A	N/A	N/A	N/A
Welder / Torch	62	58	N/A	N/A	N/A	N/A	N/A
Total	72	71.2	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/3/2018
Case Description: Hassen_Grading

---- Receptor #1 ----				
Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 60'	Residential	65	60	55

Description	Equipment					
	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Grader	No	40	85		60	0
Dozer	No	40		81.7	60	0
Tractor	No	40	84		60	0

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
			Day			Evening	Night
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Grader	83.4	79.4	N/A	N/A	N/A	N/A	N/A
Dozer	80.1	76.1	N/A	N/A	N/A	N/A	N/A
Tractor	82.4	78.4	N/A	N/A	N/A	N/A	N/A
Total	83.4	83	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----				
Baselines (dBA)				

Description	Land Use	Daytime	Evening	Night
Typical Receiver 200'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		200	0
Dozer	No	40		81.7	200	0
Tractor	No	40	84		200	0

Results							
Calculated (dBA)				Noise Limits (dBA)			
		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Grader	73	69	N/A	N/A	N/A	N/A	N/A
Dozer	69.6	65.6	N/A	N/A	N/A	N/A	N/A
Tractor	72	68	N/A	N/A	N/A	N/A	N/A
Total	73	72.5	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.							

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/3/2018
Case Description: Hassen_Paving (Slab Work)

---- Receptor #1 ----							
Baselines (dBA)							
Description	Land Use	Daytime	Evening	Night			
Nearest Receiver 60'	Residential	65	60	55			
Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)	
			Spec Lmax (dBA)	Actual Lmax (dBA)			
Concrete Mixer Truck	No	40		78.8	60	0	
Paver	No	50		77.2	60	0	
All Other Equipment > 5 HP	No	50	85		60	0	
Roller	No	20		80	80	0	
Tractor	No	40	84		80	0	
Results							
Calculated (dBA)				Noise Limits (dBA)			
		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Mixer Truck	77.2	73.2	N/A	N/A	N/A	N/A	N/A
Paver	75.6	72.6	N/A	N/A	N/A	N/A	N/A

All Other Equipment > 5 HP	83.4	80.4	N/A	N/A	N/A	N/A	N/A
Roller	75.9	68.9	N/A	N/A	N/A	N/A	N/A
Tractor	79.9	75.9	N/A	N/A	N/A	N/A	N/A
Total	83.4	82.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Typical Receiver 200'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	200	0
Paver	No	50		77.2	200	0
All Other Equipment > 5 HP	No	50	85		200	0
Roller	No	20		80	200	0
Tractor	No	40	84		200	0

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
			Day			Evening	Night
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Mixer Truck	66.8	62.8	N/A	N/A	N/A	N/A	N/A
Paver	65.2	62.2	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	73	69.9	N/A	N/A	N/A	N/A	N/A
Roller	68	61	N/A	N/A	N/A	N/A	N/A
Tractor	72	68	N/A	N/A	N/A	N/A	N/A
Total	73	73.2	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Traffic Noise Model Input / Output

INPUT: ROADWAYS
8817.0002

Dudek MG					22 May 2019 TNM 2.5						
INPUT: ROADWAYS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA					
PROJECT/CONTRACT:		8817.0002									
RUN:		Covina Hassen A (Townhomes) Existing									
Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control				Segment
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
W San Bernardino Ave w of Hollenbeck	45.0	point1	1	214.8	2,409.7	575.00				Average	
		point3	3	854.3	2,460.0	575.00					
3rd Ave S of San Bernardino Ave	35.0	point27	27	2,844.4	1,276.4	575.00				Average	
		point12	12	2,833.5	2,492.7	575.00				Average	
		point13	13	2,818.3	2,609.3	575.00					
Citrus Ave N of San Bernardino Ave	65.0	point29	29	3,501.6	4,608.6	575.00				Average	
		point16	16	3,490.9	2,663.9	575.00					
2nd Ave S of San Bernardino Ave	65.0	point31	31	4,179.6	1,692.6	575.00				Average	
		point19	19	4,185.1	2,717.9	575.00					
N Barranca Ave S of San Bernardino Av	55.0	point33	33	6,169.5	1,279.2	575.00				Average	
		point22	22	6,169.5	2,888.8	575.00					
Hollenbeck Ave S of San Bernardino Av	55.0	point36	36	844.9	1,325.7	575.00				Average	
		point9	9	855.3	2,459.5	575.00					
Hollenbeck Ave N of San Bernardino Av	55.0	point38	38	855.3	2,460.5	575.00				Average	
		point10	10	860.8	4,321.8	575.00					
Citrus Ave S of San Bernardino Ave	65.0	point42	42	3,491.0	2,661.6	575.00				Average	
		point17	17	3,507.5	265.0	575.00					
2nd Ave N of San Bernardino Ave	70.0	point44	44	4,185.1	2,717.9	575.00				Average	
		point20	20	4,185.1	3,175.4	575.00					
N Barranca Ave N of San Bernardino Av	55.0	point46	46	6,169.5	2,888.8	575.00				Average	
		point23	23	6,158.6	4,557.9	575.00					
W San Bernardino Ave e of Hollenbeck	45.0	point47	47	857.4	2,460.3	575.00				Average	
		point53	53	1,837.2	2,535.2	575.00					
W San Bernardino Ave e of 3rd Ave	45.0	point48	48	2,819.1	2,610.2	575.00				Average	
		point5	5	3,488.9	2,660.9	575.00					

INPUT: ROADWAYS**8817.0002**

W San Bernardino Ave e of Citrus Ave	45.0	point49	49	3,493.6	2,661.9	575.00				Average	
		point6	6	4,184.1	2,717.3	575.00					
W San Bernardino Ave e of Barranca	45.0	point52	52	6,173.8	2,884.5	575.00				Average	
		point2	2	6,533.7	2,906.9	575.00					
W San Bernardino Ave w of 2nd Ave	45.0	point54	54	1,837.2	2,535.2	575.00				Average	
		point4	4	2,817.0	2,610.2	575.00					
W San Bernardino Ave w of Brnca	45.0	point50	50	4,186.8	2,717.7	575.00				Average	
		point55	55	4,823.0	2,768.5	575.00				Average	
		point25	25	6,162.9	2,883.4	575.00					
3rd Avenue n of W San Bernardino Ave	12.0	point63	63	2,817.1	2,629.2	0.00				Average	
		point64	64	2,790.0	3,172.2	0.00					

INPUT: TRAFFIC FOR LAeq1h Percentages
8817.0002

Dudek													
MG													
INPUT: TRAFFIC FOR LAeq1h Percentages													
PROJECT/CONTRACT:				8817.0002									
RUN:				Covina Hassen A (Townhomes) Existing									
Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos	MTrucks		HTrucks		Buses		Motorcycles		
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
W San Bernardino Ave w of Hollenbeck	point1	1	1364	97	30	2	30	1	30	0	0	0	0
	point3	3											
3rd Ave S of San Bernardino Ave	point27	27	233	97	25	2	25	1	25	0	0	0	0
	point12	12	233	97	25	2	25	1	25	0	0	0	0
	point13	13											
Citrus Ave N of San Bernardino Ave	point29	29	889	97	35	2	35	1	35	0	0	0	0
	point16	16											
2nd Ave S of San Bernardino Ave	point31	31	669	97	30	2	30	1	30	0	0	0	0
	point19	19											
N Barranca Ave S of San Bernardino Av	point33	33	1540	97	35	2	35	1	35	0	0	0	0
	point22	22											
Hollenbeck Ave S of San Bernardino Av	point36	36	1250	97	35	2	35	1	35	0	0	0	0
	point9	9											
Hollenbeck Ave N of San Bernardino Av	point38	38	1660	97	35	2	35	1	35	0	0	0	0
	point10	10											
Citrus Ave S of San Bernardino Ave	point42	42	821	97	35	2	35	1	35	0	0	0	0
	point17	17											
2nd Ave N of San Bernardino Ave	point44	44	302	97	30	2	30	1	30	0	0	0	0
	point20	20											
N Barranca Ave N of San Bernardino Av	point46	46	1762	97	35	2	35	1	35	0	0	0	0
	point23	23											
W San Bernardino Ave e of Hollenbeck	point47	47	1152	97	30	2	30	1	30	0	0	0	0
	point53	53											

INPUT: TRAFFIC FOR LAeq1h Percentages**8817.0002**

W San Bernardino Ave e of 3rd Ave	point48	48	1164	97	30	2	30	1	30	0	0	0	0
	point5	5											
W San Bernardino Ave e of Citrus Ave	point49	49	1071	97	35	2	35	1	35	0	0	0	0
	point6	6											
W San Bernardino Ave e of Barranca	point52	52	913	97	35	2	35	1	35	0	0	0	0
	point2	2											
W San Bernardino Ave w of 2nd Ave	point54	54	1216	97	30	2	30	1	30	0	0	0	0
	point4	4											
W San Bernardino Ave w of Brnca	point50	50	1043	97	35	2	35	1	35	0	0	0	0
	point55	55	1043	97	35	2	35	1	35	0	0	0	0
	point25	25											
3rd Avenue n of W San Bernardino Ave	point63	63	79	97	25	2	25	1	25	0	0	0	0
	point64	64											

INPUT: RECEIVERS
8817.0002

Dudek						22 May 2019					
MG						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	8817.0002										
RUN:	Covina Hassen A (Townhomes) Existing										
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 - Onsite B2	1	1	3,252.5	2,352.6	575.00	5.00	0.00	66	10.0	8.0	Y
M2 - Residential use s of B2	2	1	3,157.0	2,251.9	575.00	5.00	0.00	66	10.0	8.0	Y
M3 - Mixed use e of B1	3	1	3,539.0	2,227.6	575.00	5.00	0.00	66	10.0	8.0	Y
M4 - Civic Center Park	4	1	3,592.6	2,478.1	575.00	5.00	0.00	66	10.0	8.0	Y
M5 - Onsite C	5	1	3,948.7	2,779.8	575.00	5.00	0.00	66	10.0	8.0	Y
M6 - Church se of C	6	1	4,583.0	2,684.1	575.00	5.00	0.00	66	10.0	8.0	Y
M7 - Onsite A	7	1	3,176.4	2,664.1	575.00	5.00	0.00	66	10.0	8.0	Y
M8 - Onsite A	8	1	3,410.0	2,725.0	575.00	5.00	0.00	66	10.0	8.0	Y
M9 - Resi w of N 3rd Ave	9	1	2,783.4	2,778.9	575.00	5.00	0.00	66	10.0	8.0	Y
R1 - Resi w of Hollenbeck	10	1	667.2	2,533.1	575.00	5.00	0.00	66	10.0	8.0	Y
R2 - Resi w of 3rd Ave	11	1	2,323.1	2,661.0	575.00	5.00	0.00	66	10.0	8.0	Y
R3 - Resi on Citrus Ave n of Project	14	1	3,563.9	4,256.9	575.00	5.00	0.00	66	10.0	8.0	Y
R4 - Resi on Barranca Ave ne of Proj	16	1	6,063.0	4,271.2	575.00	5.00	0.00	66	10.0	8.0	Y
R5 - Resi on Citrus Ave s of Project	17	1	3,558.3	760.7	575.00	5.00	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS
8817.0002

Dudek MG													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
M1 - Onsite B2	1	1	0.0	56.9	66	56.9	10	----	56.9	0.0	8	-8.0	
M2 - Residential use s of B2	2	1	0.0	53.7	66	53.7	10	----	53.7	0.0	8	-8.0	
M3 - Mixed use e of B1	3	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0	
M4 - Civic Center Park	4	1	0.0	61.9	66	61.9	10	----	61.9	0.0	8	-8.0	
M5 - Onsite C	5	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0	
M6 - Church se of C	6	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0	
M7 - Onsite A	7	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0	
M8 - Onsite A	8	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0	
M9 - Resi w of N 3rd Ave	9	1	0.0	58.4	66	58.4	10	----	58.4	0.0	8	-8.0	
R1 - Resi w of Hollenbeck	10	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0	
R2 - Resi w of 3rd Ave	11	1	0.0	60.9	66	60.9	10	----	60.9	0.0	8	-8.0	
R3 - Resi on Citrus Ave n of Project	14	1	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0	
R4 - Resi on Barranca Ave ne of Proj	16	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0	
R5 - Resi on Citrus Ave s of Project	17	1	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		14	0.0	0.0	0.0								
All Impacted		1	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

INPUT: ROADWAYS
8817.0006

Dudek MG					22 May 2019 TNM 2.5						
INPUT: ROADWAYS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA					
PROJECT/CONTRACT:		8817.0006									
RUN:		Covina Hassen A (Twnhms) Exist w Prj									
Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control				Segment
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
W San Bernardino Ave w of Hollenbeck	45.0	point1	1	214.8	2,409.7	575.00				Average	
		point3	3	854.3	2,460.0	575.00					
3rd Ave S of San Bernardino Ave	35.0	point27	27	2,844.4	1,276.4	575.00				Average	
		point12	12	2,833.5	2,492.7	575.00				Average	
		point13	13	2,818.3	2,609.3	575.00					
Citrus Ave N of San Bernardino Ave	65.0	point29	29	3,501.6	4,608.6	575.00				Average	
		point16	16	3,490.9	2,663.9	575.00					
2nd Ave S of San Bernardino Ave	65.0	point31	31	4,179.6	1,692.6	575.00				Average	
		point19	19	4,185.1	2,717.9	575.00					
N Barranca Ave S of San Bernardino Av	55.0	point33	33	6,169.5	1,279.2	575.00				Average	
		point22	22	6,169.5	2,888.8	575.00					
Hollenbeck Ave S of San Bernardino Av	55.0	point36	36	844.9	1,325.7	575.00				Average	
		point9	9	855.3	2,459.5	575.00					
Hollenbeck Ave N of San Bernardino Av	55.0	point38	38	855.3	2,460.5	575.00				Average	
		point10	10	860.8	4,321.8	575.00					
Citrus Ave S of San Bernardino Ave	65.0	point42	42	3,491.0	2,661.6	575.00				Average	
		point17	17	3,507.5	265.0	575.00					
2nd Ave N of San Bernardino Ave	70.0	point44	44	4,185.1	2,717.9	575.00				Average	
		point20	20	4,185.1	3,175.4	575.00					
N Barranca Ave N of San Bernardino Av	55.0	point46	46	6,169.5	2,888.8	575.00				Average	
		point23	23	6,158.6	4,557.9	575.00					
W San Bernardino Ave e of Hollenbeck	45.0	point47	47	857.4	2,460.3	575.00				Average	
		point53	53	1,837.2	2,535.2	575.00					
W San Bernardino Ave e of 3rd Ave	45.0	point48	48	2,819.1	2,610.2	575.00				Average	
		point5	5	3,488.9	2,660.9	575.00					

INPUT: ROADWAYS**8817.0006**

W San Bernardino Ave e of Citrus Ave	45.0	point49	49	3,493.6	2,661.9	575.00				Average	
		point6	6	4,184.1	2,717.3	575.00					
W San Bernardino Ave e of Barranca	45.0	point52	52	6,173.8	2,884.5	575.00				Average	
		point2	2	6,533.7	2,906.9	575.00					
W San Bernardino Ave w of 2nd Ave	45.0	point54	54	1,837.2	2,535.2	575.00				Average	
		point4	4	2,817.0	2,610.2	575.00					
W San Bernardino Ave w of Brnca	45.0	point50	50	4,186.8	2,717.7	575.00				Average	
		point55	55	4,823.0	2,768.5	575.00				Average	
		point25	25	6,162.9	2,883.4	575.00					
3rd Avenue n of W San Bernardino Ave	12.0	point63	63	2,817.1	2,629.2	0.00				Average	
		point64	64	2,790.0	3,172.2	0.00					

INPUT: TRAFFIC FOR LAeq1h Percentages
8817.0006

Dudek													
MG													
INPUT: TRAFFIC FOR LAeq1h Percentages													
PROJECT/CONTRACT:	8817.0006												
RUN:	Covina Hassen A (Twnhms) Exist w Prj												
Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
W San Bernardino Ave w of Hollenbeck	point1	1	1376	97	30	2	30	1	30	0	0	0	0
	point3	3											
3rd Ave S of San Bernardino Ave	point27	27	232	97	25	2	25	1	25	0	0	0	0
	point12	12	232	97	25	2	25	1	25	0	0	0	0
	point13	13											
Citrus Ave N of San Bernardino Ave	point29	29	1015	97	35	2	35	1	35	0	0	0	0
	point16	16											
2nd Ave S of San Bernardino Ave	point31	31	669	97	30	2	30	1	30	0	0	0	0
	point19	19											
N Barranca Ave S of San Bernardino Av	point33	33	1552	97	35	2	35	1	35	0	0	0	0
	point22	22											
Hollenbeck Ave S of San Bernardino Av	point36	36	1259	97	35	2	35	1	35	0	0	0	0
	point9	9											
Hollenbeck Ave N of San Bernardino Av	point38	38	1665	97	35	2	35	1	35	0	0	0	0
	point10	10											
Citrus Ave S of San Bernardino Ave	point42	42	852	97	35	2	35	1	35	0	0	0	0
	point17	17											
2nd Ave N of San Bernardino Ave	point44	44	302	97	30	2	30	1	30	0	0	0	0
	point20	20											
N Barranca Ave N of San Bernardino Av	point46	46	1773	97	35	2	35	1	35	0	0	0	0
	point23	23											
W San Bernardino Ave e of Hollenbeck	point47	47	1178	97	30	2	30	1	30	0	0	0	0
	point53	53											

INPUT: TRAFFIC FOR LAeq1h Percentages**8817.0006**

W San Bernardino Ave e of 3rd Ave	point48	48	1238	97	30	2	30	1	30	0	0	0	0
	point5	5											
W San Bernardino Ave e of Citrus Ave	point49	49	1113	97	35	2	35	1	35	0	0	0	0
	point6	6											
W San Bernardino Ave e of Barranca	point52	52	927	97	35	2	35	1	35	0	0	0	0
	point2	2											
W San Bernardino Ave w of 2nd Ave	point54	54	1255	97	30	2	30	1	30	0	0	0	0
	point4	4											
W San Bernardino Ave w of Brnca	point50	50	1080	97	35	2	35	1	35	0	0	0	0
	point55	55	1080	97	35	2	35	1	35	0	0	0	0
	point25	25											
3rd Avenue n of W San Bernardino Ave	point63	63	43	97	25	2	25	1	25	0	0	0	0
	point64	64											

INPUT: RECEIVERS
8817.0006

Dudek											
MG											
INPUT: RECEIVERS											
PROJECT/CONTRACT:	8817.0006										
RUN:	Covina Hassen A (Twnhms) Exist w Prj										
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 - Onsite B2	1	1	3,252.5	2,352.6	575.00	5.00	0.00	66	10.0	8.0	Y
M2 - Residential use s of B2	2	1	3,157.0	2,251.9	575.00	5.00	0.00	66	10.0	8.0	Y
M3 - Mixed use e of B1	3	1	3,539.0	2,227.6	575.00	5.00	0.00	66	10.0	8.0	Y
M4 - Civic Center Park	4	1	3,592.6	2,478.1	575.00	5.00	0.00	66	10.0	8.0	Y
M5 - Onsite C	5	1	3,948.7	2,779.8	575.00	5.00	0.00	66	10.0	8.0	Y
M6 - Church se of C	6	1	4,583.0	2,684.1	575.00	5.00	0.00	66	10.0	8.0	Y
M7 - Onsite A	7	1	3,176.4	2,664.1	575.00	5.00	0.00	66	10.0	8.0	Y
M8 - Onsite A	8	1	3,410.0	2,725.0	575.00	5.00	0.00	66	10.0	8.0	Y
M9 - Resi w of N 3rd Ave	9	1	2,783.4	2,778.9	575.00	5.00	0.00	66	10.0	8.0	Y
R1 - Resi w of Hollenbeck	10	1	667.2	2,533.1	575.00	5.00	0.00	66	10.0	8.0	Y
R2 - Resi w of 3rd Ave	11	1	2,323.1	2,661.0	575.00	5.00	0.00	66	10.0	8.0	Y
R3 - Resi on Citrus Ave n of Project	14	1	3,563.9	4,256.9	575.00	5.00	0.00	66	10.0	8.0	Y
R4 - Resi on Barranca Ave ne of Proj	16	1	6,063.0	4,271.2	575.00	5.00	0.00	66	10.0	8.0	Y
R5 - Resi on Citrus Ave s of Project	17	1	3,558.3	760.7	575.00	5.00	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS
8817.0006

Dudek MG													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	dB
M1 - Onsite B2	1	1	0.0	57.2	66	57.2	10	----	57.2	0.0	8	-8.0	
M2 - Residential use s of B2	2	1	0.0	53.9	66	53.9	10	----	53.9	0.0	8	-8.0	
M3 - Mixed use e of B1	3	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0	
M4 - Civic Center Park	4	1	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0	
M5 - Onsite C	5	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0	
M6 - Church se of C	6	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0	
M7 - Onsite A	7	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0	
M8 - Onsite A	8	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0	
M9 - Resi w of N 3rd Ave	9	1	0.0	58.4	66	58.4	10	----	58.4	0.0	8	-8.0	
R1 - Resi w of Hollenbeck	10	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0	
R2 - Resi w of 3rd Ave	11	1	0.0	61.0	66	61.0	10	----	61.0	0.0	8	-8.0	
R3 - Resi on Citrus Ave n of Project	14	1	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0	
R4 - Resi on Barranca Ave ne of Proj	16	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0	
R5 - Resi on Citrus Ave s of Project	17	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		14	0.0	0.0	0.0								
All Impacted		1	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

INPUT: ROADWAYS
8817.0006

Dudek MG												
INPUT: ROADWAYS												
PROJECT/CONTRACT:	8817.0006											
RUN:	Covina Hassen A (Twnhms) Future											
Roadway		Points										
Name	Width	Name	No.	Coordinates (pavement)			Flow Control				Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On	
							Device	Constraint	Vehicles	Type	Struct?	
									Affected			
	ft			ft	ft	ft		mph	%			
W San Bernardino Ave w of Hollenbeck	45.0	point1	1	214.8	2,409.7	575.00				Average		
		point3	3	854.3	2,460.0	575.00						
3rd Ave S of San Bernardino Ave	35.0	point27	27	2,844.4	1,276.4	575.00				Average		
		point12	12	2,833.5	2,492.7	575.00				Average		
		point13	13	2,818.3	2,609.3	575.00						
Citrus Ave N of San Bernardino Ave	65.0	point29	29	3,501.6	4,608.6	575.00				Average		
		point16	16	3,490.9	2,663.9	575.00						
2nd Ave S of San Bernardino Ave	65.0	point31	31	4,179.6	1,692.6	575.00				Average		
		point19	19	4,185.1	2,717.9	575.00						
N Barranca Ave S of San Bernardino Av	55.0	point33	33	6,169.5	1,279.2	575.00				Average		
		point22	22	6,169.5	2,888.8	575.00						
Hollenbeck Ave S of San Bernardino Av	55.0	point36	36	844.9	1,325.7	575.00				Average		
		point9	9	855.3	2,459.5	575.00						
Hollenbeck Ave N of San Bernardino Av	55.0	point38	38	855.3	2,460.5	575.00				Average		
		point10	10	860.8	4,321.8	575.00						
Citrus Ave S of San Bernardino Ave	65.0	point42	42	3,491.0	2,661.6	575.00				Average		
		point17	17	3,507.5	265.0	575.00						
2nd Ave N of San Bernardino Ave	70.0	point44	44	4,185.1	2,717.9	575.00				Average		
		point20	20	4,185.1	3,175.4	575.00						
N Barranca Ave N of San Bernardino Av	55.0	point46	46	6,169.5	2,888.8	575.00				Average		
		point23	23	6,158.6	4,557.9	575.00						
W San Bernardino Ave e of Hollenbeck	45.0	point47	47	857.4	2,460.3	575.00				Average		
		point53	53	1,837.2	2,535.2	575.00						
W San Bernardino Ave e of 3rd Ave	45.0	point48	48	2,819.1	2,610.2	575.00				Average		
		point5	5	3,488.9	2,660.9	575.00						

INPUT: ROADWAYS**8817.0006**

W San Bernardino Ave e of Citrus Ave	45.0	point49	49	3,493.6	2,661.9	575.00				Average	
		point6	6	4,184.1	2,717.3	575.00					
W San Bernardino Ave e of Barranca	45.0	point52	52	6,173.8	2,884.5	575.00				Average	
		point2	2	6,533.7	2,906.9	575.00					
W San Bernardino Ave w of 2nd Ave	45.0	point54	54	1,837.2	2,535.2	575.00				Average	
		point4	4	2,817.0	2,610.2	575.00					
W San Bernardino Ave w of Brnca	45.0	point50	50	4,186.8	2,717.7	575.00				Average	
		point55	55	4,823.0	2,768.5	575.00				Average	
		point25	25	6,162.9	2,883.4	575.00					
3rd Avenue n of W San Bernardino Ave	12.0	point63	63	2,817.1	2,629.2	0.00				Average	
		point64	64	2,790.0	3,172.2	0.00					

INPUT: TRAFFIC FOR LAeq1h Percentages
8817.0006

Dudek													
MG													
INPUT: TRAFFIC FOR LAeq1h Percentages													
PROJECT/CONTRACT:				8817.0006									
RUN:				Covina Hassen A (Twnhms) Future									
Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
W San Bernardino Ave w of Hollenbeck	point1	1	1425	97	30	2	30	1	30	0	0	0	0
	point3	3											
3rd Ave S of San Bernardino Ave	point27	27	238	97	25	2	25	1	25	0	0	0	0
	point12	12	238	97	25	2	25	1	25	0	0	0	0
	point13	13											
Citrus Ave N of San Bernardino Ave	point29	29	974	97	35	2	35	1	35	0	0	0	0
	point16	16											
2nd Ave S of San Bernardino Ave	point31	31	669	97	30	2	30	1	30	0	0	0	0
	point19	19											
N Barranca Ave S of San Bernardino Av	point33	33	1608	97	35	2	35	1	35	0	0	0	0
	point22	22											
Hollenbeck Ave S of San Bernardino Av	point36	36	1296	97	35	2	35	1	35	0	0	0	0
	point9	9											
Hollenbeck Ave N of San Bernardino Av	point38	38	1713	97	35	2	35	1	35	0	0	0	0
	point10	10											
Citrus Ave S of San Bernardino Ave	point42	42	897	97	35	2	35	1	35	0	0	0	0
	point17	17											
2nd Ave N of San Bernardino Ave	point44	44	302	97	30	2	30	1	30	0	0	0	0
	point20	20											
N Barranca Ave N of San Bernardino Av	point46	46	1851	97	35	2	35	1	35	0	0	0	0
	point23	23											
W San Bernardino Ave e of Hollenbeck	point47	47	1216	97	30	2	30	1	30	0	0	0	0
	point53	53											

INPUT: TRAFFIC FOR LAeq1h Percentages**8817.0006**

W San Bernardino Ave e of 3rd Ave	point48	48	1229	97	30	2	30	1	30	0	0	0	0
	point5	5											
W San Bernardino Ave e of Citrus Ave	point49	49	1142	97	35	2	35	1	35	0	0	0	0
	point6	6											
W San Bernardino Ave e of Barranca	point52	52	968	97	35	2	35	1	35	0	0	0	0
	point2	2											
W San Bernardino Ave w of 2nd Ave	point54	54	1283	97	30	2	30	1	30	0	0	0	0
	point4	4											
W San Bernardino Ave w of Brnca	point50	50	1111	97	35	2	35	1	35	0	0	0	0
	point55	55	1111	97	35	2	35	1	35	0	0	0	0
	point25	25											
3rd Avenue n of W San Bernardino Ave	point63	63	80	97	25	2	25	1	25	0	0	0	0
	point64	64											

INPUT: RECEIVERS
8817.0006

Dudek						22 May 2019					
MG						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	8817.0006										
RUN:	Covina Hassen A (Twnhms) Future										
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 - Onsite B2	1	1	3,252.5	2,352.6	575.00	5.00	0.00	66	10.0	8.0	Y
M2 - Residential use s of B2	2	1	3,157.0	2,251.9	575.00	5.00	0.00	66	10.0	8.0	Y
M3 - Mixed use e of B1	3	1	3,539.0	2,227.6	575.00	5.00	0.00	66	10.0	8.0	Y
M4 - Civic Center Park	4	1	3,592.6	2,478.1	575.00	5.00	0.00	66	10.0	8.0	Y
M5 - Onsite C	5	1	3,948.7	2,779.8	575.00	5.00	0.00	66	10.0	8.0	Y
M6 - Church se of C	6	1	4,583.0	2,684.1	575.00	5.00	0.00	66	10.0	8.0	Y
M7 - Onsite A	7	1	3,176.4	2,664.1	575.00	5.00	0.00	66	10.0	8.0	Y
M8 - Onsite A	8	1	3,410.0	2,725.0	575.00	5.00	0.00	66	10.0	8.0	Y
M9 - Resi w of N 3rd Ave	9	1	2,783.4	2,778.9	575.00	5.00	0.00	66	10.0	8.0	Y
R1 - Resi w of Hollenbeck	10	1	667.2	2,533.1	575.00	5.00	0.00	66	10.0	8.0	Y
R2 - Resi w of 3rd Ave	11	1	2,323.1	2,661.0	575.00	5.00	0.00	66	10.0	8.0	Y
R3 - Resi on Citrus Ave n of Project	14	1	3,563.9	4,256.9	575.00	5.00	0.00	66	10.0	8.0	Y
R4 - Resi on Barranca Ave ne of Proj	16	1	6,063.0	4,271.2	575.00	5.00	0.00	66	10.0	8.0	Y
R5 - Resi on Citrus Ave s of Project	17	1	3,558.3	760.7	575.00	5.00	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS
8817.0006

Dudek MG													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	dB
M1 - Onsite B2	1	1	0.0	57.3	66	57.3	10	----	57.3	0.0	8	-8.0	
M2 - Residential use s of B2	2	1	0.0	54.0	66	54.0	10	----	54.0	0.0	8	-8.0	
M3 - Mixed use e of B1	3	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0	
M4 - Civic Center Park	4	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0	
M5 - Onsite C	5	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0	
M6 - Church se of C	6	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0	
M7 - Onsite A	7	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0	
M8 - Onsite A	8	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0	
M9 - Resi w of N 3rd Ave	9	1	0.0	58.6	66	58.6	10	----	58.6	0.0	8	-8.0	
R1 - Resi w of Hollenbeck	10	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0	
R2 - Resi w of 3rd Ave	11	1	0.0	61.1	66	61.1	10	----	61.1	0.0	8	-8.0	
R3 - Resi on Citrus Ave n of Project	14	1	0.0	63.0	66	63.0	10	----	63.0	0.0	8	-8.0	
R4 - Resi on Barranca Ave ne of Proj	16	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0	
R5 - Resi on Citrus Ave s of Project	17	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		14	0.0	0.0	0.0								
All Impacted		1	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

INPUT: ROADWAYS
8817.0006

Dudek												
MG												
INPUT: ROADWAYS												
PROJECT/CONTRACT:				8817.0006								
RUN:				Covina Hassen A (Twnhms) Fut w Proj								
Roadway		Points										
Name	Width	Name	No.	Coordinates (pavement)			Flow Control				Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On	
							Device	Constraint	Vehicles	Type	Struct?	
									Affected			
	ft			ft	ft	ft		mph	%			
W San Bernardino Ave w of Hollenbeck	45.0	point1	1	214.8	2,409.7	575.00				Average		
		point3	3	854.3	2,460.0	575.00						
3rd Ave S of San Bernardino Ave	35.0	point27	27	2,844.4	1,276.4	575.00				Average		
		point12	12	2,833.5	2,492.7	575.00				Average		
		point13	13	2,818.3	2,609.3	575.00						
Citrus Ave N of San Bernardino Ave	65.0	point29	29	3,501.6	4,608.6	575.00				Average		
		point16	16	3,490.9	2,663.9	575.00						
2nd Ave S of San Bernardino Ave	65.0	point31	31	4,179.6	1,692.6	575.00				Average		
		point19	19	4,185.1	2,717.9	575.00						
N Barranca Ave S of San Bernardino Av	55.0	point33	33	6,169.5	1,279.2	575.00				Average		
		point22	22	6,169.5	2,888.8	575.00						
Hollenbeck Ave S of San Bernardino Av	55.0	point36	36	844.9	1,325.7	575.00				Average		
		point9	9	855.3	2,459.5	575.00						
Hollenbeck Ave N of San Bernardino Av	55.0	point38	38	855.3	2,460.5	575.00				Average		
		point10	10	860.8	4,321.8	575.00						
Citrus Ave S of San Bernardino Ave	65.0	point42	42	3,491.0	2,661.6	575.00				Average		
		point17	17	3,507.5	265.0	575.00						
2nd Ave N of San Bernardino Ave	70.0	point44	44	4,185.1	2,717.9	575.00				Average		
		point20	20	4,185.1	3,175.4	575.00						
N Barranca Ave N of San Bernardino Av	55.0	point46	46	6,169.5	2,888.8	575.00				Average		
		point23	23	6,158.6	4,557.9	575.00						
W San Bernardino Ave e of Hollenbeck	45.0	point47	47	857.4	2,460.3	575.00				Average		
		point53	53	1,837.2	2,535.2	575.00						
W San Bernardino Ave e of 3rd Ave	45.0	point48	48	2,819.1	2,610.2	575.00				Average		
		point5	5	3,488.9	2,660.9	575.00						

INPUT: ROADWAYS**8817.0006**

W San Bernardino Ave e of Citrus Ave	45.0	point49	49	3,493.6	2,661.9	575.00				Average	
		point6	6	4,184.1	2,717.3	575.00					
W San Bernardino Ave e of Barranca	45.0	point52	52	6,173.8	2,884.5	575.00				Average	
		point2	2	6,533.7	2,906.9	575.00					
W San Bernardino Ave w of 2nd Ave	45.0	point54	54	1,837.2	2,535.2	575.00				Average	
		point4	4	2,817.0	2,610.2	575.00					
W San Bernardino Ave w of Brnca	45.0	point50	50	4,186.8	2,717.7	575.00				Average	
		point55	55	4,823.0	2,768.5	575.00				Average	
		point25	25	6,162.9	2,883.4	575.00					
3rd Avenue n of W San Bernardino Ave	12.0	point63	63	2,817.1	2,629.2	0.00				Average	
		point64	64	2,790.0	3,172.2	0.00					

INPUT: TRAFFIC FOR LAeq1h Percentages
8817.0006

Dudek													
MG													
INPUT: TRAFFIC FOR LAeq1h Percentages PROJECT/CONTRACT: 8817.0006 RUN: Covina Hassen A (Twnhms) Fut w Proj													
Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos	MTrucks		HTrucks		Buses		Motorcycles		
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
W San Bernardino Ave w of Hollenbeck	point1	1	1437	97	30	2	30	1	30	0	0	0	0
	point3	3											
3rd Ave S of San Bernardino Ave	point27	27	237	97	25	2	25	1	25	0	0	0	0
	point12	12	237	97	25	2	25	1	25	0	0	0	0
	point13	13											
Citrus Ave N of San Bernardino Ave	point29	29	1100	97	35	2	35	1	35	0	0	0	0
	point16	16											
2nd Ave S of San Bernardino Ave	point31	31	669	97	30	2	30	1	30	0	0	0	0
	point19	19											
N Barranca Ave S of San Bernardino Av	point33	33	1620	97	35	2	35	1	35	0	0	0	0
	point22	22											
Hollenbeck Ave S of San Bernardino Av	point36	36	1305	97	35	2	35	1	35	0	0	0	0
	point9	9											
Hollenbeck Ave N of San Bernardino Av	point38	38	1718	97	35	2	35	1	35	0	0	0	0
	point10	10											
Citrus Ave S of San Bernardino Ave	point42	42	928	97	35	2	35	1	35	0	0	0	0
	point17	17											
2nd Ave N of San Bernardino Ave	point44	44	302	97	30	2	30	1	30	0	0	0	0
	point20	20											
N Barranca Ave N of San Bernardino Av	point46	46	1862	97	35	2	35	1	35	0	0	0	0
	point23	23											
W San Bernardino Ave e of Hollenbeck	point47	47	1242	97	30	2	30	1	30	0	0	0	0
	point53	53											

INPUT: TRAFFIC FOR LAeq1h Percentages**8817.0006**

W San Bernardino Ave e of 3rd Ave	point48	48	1303	97	30	2	30	1	30	0	0	0	0
	point5	5											
W San Bernardino Ave e of Citrus Ave	point49	49	1184	97	35	2	35	1	35	0	0	0	0
	point6	6											
W San Bernardino Ave e of Barranca	point52	52	982	97	35	2	35	1	35	0	0	0	0
	point2	2											
W San Bernardino Ave w of 2nd Ave	point54	54	1322	97	30	2	30	1	30	0	0	0	0
	point4	4											
W San Bernardino Ave w of Brnca	point50	50	1148	97	35	2	35	1	35	0	0	0	0
	point55	55	1148	97	35	2	35	1	35	0	0	0	0
	point25	25											
3rd Avenue n of W San Bernardino Ave	point63	63	44	97	25	2	25	1	25	0	0	0	0
	point64	64											

INPUT: RECEIVERS
8817.0006

Dudek						22 May 2019					
MG						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	8817.0006										
RUN:	Covina Hassen A (Twnhms) Fut w Proj										
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 - Onsite B2	1	1	3,252.5	2,352.6	575.00	5.00	0.00	66	10.0	8.0	Y
M2 - Residential use s of B2	2	1	3,157.0	2,251.9	575.00	5.00	0.00	66	10.0	8.0	Y
M3 - Mixed use e of B1	3	1	3,539.0	2,227.6	575.00	5.00	0.00	66	10.0	8.0	Y
M4 - Civic Center Park	4	1	3,592.6	2,478.1	575.00	5.00	0.00	66	10.0	8.0	Y
M5 - Onsite C	5	1	3,948.7	2,779.8	575.00	5.00	0.00	66	10.0	8.0	Y
M6 - Church se of C	6	1	4,583.0	2,684.1	575.00	5.00	0.00	66	10.0	8.0	Y
M7 - Onsite A	7	1	3,176.4	2,664.1	575.00	5.00	0.00	66	10.0	8.0	Y
M8 - Onsite A	8	1	3,410.0	2,725.0	575.00	5.00	0.00	66	10.0	8.0	Y
M9 - Resi w of N 3rd Ave	9	1	2,783.4	2,778.9	575.00	5.00	0.00	66	10.0	8.0	Y
R1 - Resi w of Hollenbeck	10	1	667.2	2,533.1	575.00	5.00	0.00	66	10.0	8.0	Y
R2 - Resi w of 3rd Ave	11	1	2,323.1	2,661.0	575.00	5.00	0.00	66	10.0	8.0	Y
R3 - Resi on Citrus Ave n of Project	14	1	3,563.9	4,256.9	575.00	5.00	0.00	66	10.0	8.0	Y
R4 - Resi on Barranca Ave ne of Proj	16	1	6,063.0	4,271.2	575.00	5.00	0.00	66	10.0	8.0	Y
R5 - Resi on Citrus Ave s of Project	17	1	3,558.3	760.7	575.00	5.00	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS
8817.0006

Dudek													
MG													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h			Increase over existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
M1 - Onsite B2	1	1	0.0	57.5	66	57.5	10	----	57.5	0.0	8	-8.0	
M2 - Residential use s of B2	2	1	0.0	54.2	66	54.2	10	----	54.2	0.0	8	-8.0	
M3 - Mixed use e of B1	3	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0	
M4 - Civic Center Park	4	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0	
M5 - Onsite C	5	1	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0	
M6 - Church se of C	6	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0	
M7 - Onsite A	7	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0	
M8 - Onsite A	8	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0	
M9 - Resi w of N 3rd Ave	9	1	0.0	58.6	66	58.6	10	----	58.6	0.0	8	-8.0	
R1 - Resi w of Hollenbeck	10	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0	
R2 - Resi w of 3rd Ave	11	1	0.0	61.3	66	61.3	10	----	61.3	0.0	8	-8.0	
R3 - Resi on Citrus Ave n of Project	14	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0	
R4 - Resi on Barranca Ave ne of Proj	16	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0	
R5 - Resi on Citrus Ave s of Project	17	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		14	0.0	0.0	0.0								
All Impacted		1	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

INPUT: ROADWAYS
8817.0006

Dudek MG						22 May 2019 TNM 2.5						
INPUT: ROADWAYS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA						
PROJECT/CONTRACT:		8817.0006										
RUN:		Covina Hassen A (Twnhms) FwP Onsite										
Roadway		Points										
Name	Width	Name	No.	Coordinates (pavement)			Flow Control				Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?	
	ft			ft	ft	ft		mph	%			
W San Bernardino Ave w of Hollenbeck	45.0	point1	1	214.8	2,409.7	575.00				Average		
		point3	3	854.3	2,460.0	575.00						
3rd Ave S of San Bernardino Ave	35.0	point27	27	2,844.4	1,276.4	575.00				Average		
		point12	12	2,833.5	2,492.7	575.00				Average		
		point13	13	2,818.3	2,609.3	575.00						
Citrus Ave N of San Bernardino Ave	65.0	point29	29	3,501.6	4,608.6	575.00				Average		
		point16	16	3,490.9	2,663.9	575.00						
2nd Ave S of San Bernardino Ave	65.0	point31	31	4,179.6	1,692.6	575.00				Average		
		point19	19	4,185.1	2,717.9	575.00						
N Barranca Ave S of San Bernardino Av	55.0	point33	33	6,169.5	1,279.2	575.00				Average		
		point22	22	6,169.5	2,888.8	575.00						
Hollenbeck Ave S of San Bernardino Av	55.0	point36	36	844.9	1,325.7	575.00				Average		
		point9	9	855.3	2,459.5	575.00						
Hollenbeck Ave N of San Bernardino Av	55.0	point38	38	855.3	2,460.5	575.00				Average		
		point10	10	860.8	4,321.8	575.00						
Citrus Ave S of San Bernardino Ave	65.0	point42	42	3,491.0	2,661.6	575.00				Average		
		point17	17	3,507.5	265.0	575.00						
2nd Ave N of San Bernardino Ave	70.0	point44	44	4,185.1	2,717.9	575.00				Average		
		point20	20	4,185.1	3,175.4	575.00						
N Barranca Ave N of San Bernardino Av	55.0	point46	46	6,169.5	2,888.8	575.00				Average		
		point23	23	6,158.6	4,557.9	575.00						
W San Bernardino Ave e of Hollenbeck	45.0	point47	47	857.4	2,460.3	575.00				Average		
		point53	53	1,837.2	2,535.2	575.00						
W San Bernardino Ave e of 3rd Ave	45.0	point48	48	2,819.1	2,610.2	575.00				Average		
		point5	5	3,488.9	2,660.9	575.00						

INPUT: ROADWAYS**8817.0006**

W San Bernardino Ave e of Citrus Ave	45.0	point49	49	3,493.6	2,661.9	575.00				Average	
		point6	6	4,184.1	2,717.3	575.00					
W San Bernardino Ave e of Barranca	45.0	point52	52	6,173.8	2,884.5	575.00				Average	
		point2	2	6,533.7	2,906.9	575.00					
W San Bernardino Ave w of 2nd Ave	45.0	point54	54	1,837.2	2,535.2	575.00				Average	
		point4	4	2,817.0	2,610.2	575.00					
W San Bernardino Ave w of Brnca	45.0	point50	50	4,186.8	2,717.7	575.00				Average	
		point55	55	4,823.0	2,768.5	575.00				Average	
		point25	25	6,162.9	2,883.4	575.00					
3rd Avenue n of W San Bernardino Ave	12.0	point63	63	2,817.1	2,629.2	0.00				Average	
		point64	64	2,790.0	3,172.2	0.00					

INPUT: TRAFFIC FOR LAeq1h Percentages
8817.0006

Dudek													
MG													
INPUT: TRAFFIC FOR LAeq1h Percentages													
PROJECT/CONTRACT:				8817.0006									
RUN:				Covina Hassen A (Twnhms) FwP Onsite									
Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
W San Bernardino Ave w of Hollenbeck	point1	1	1437	97	30	2	30	1	30	0	0	0	0
	point3	3											
3rd Ave S of San Bernardino Ave	point27	27	237	97	25	2	25	1	25	0	0	0	0
	point12	12	237	97	25	2	25	1	25	0	0	0	0
	point13	13											
Citrus Ave N of San Bernardino Ave	point29	29	1100	97	35	2	35	1	35	0	0	0	0
	point16	16											
2nd Ave S of San Bernardino Ave	point31	31	669	97	30	2	30	1	30	0	0	0	0
	point19	19											
N Barranca Ave S of San Bernardino Av	point33	33	1620	97	35	2	35	1	35	0	0	0	0
	point22	22											
Hollenbeck Ave S of San Bernardino Av	point36	36	1305	97	35	2	35	1	35	0	0	0	0
	point9	9											
Hollenbeck Ave N of San Bernardino Av	point38	38	1718	97	35	2	35	1	35	0	0	0	0
	point10	10											
Citrus Ave S of San Bernardino Ave	point42	42	928	97	35	2	35	1	35	0	0	0	0
	point17	17											
2nd Ave N of San Bernardino Ave	point44	44	302	97	30	2	30	1	30	0	0	0	0
	point20	20											
N Barranca Ave N of San Bernardino Av	point46	46	1862	97	35	2	35	1	35	0	0	0	0
	point23	23											
W San Bernardino Ave e of Hollenbeck	point47	47	1242	97	30	2	30	1	30	0	0	0	0
	point53	53											

INPUT: TRAFFIC FOR LAeq1h Percentages**8817.0006**

W San Bernardino Ave e of 3rd Ave	point48	48	1303	97	30	2	30	1	30	0	0	0	0
	point5	5											
W San Bernardino Ave e of Citrus Ave	point49	49	1184	97	35	2	35	1	35	0	0	0	0
	point6	6											
W San Bernardino Ave e of Barranca	point52	52	982	97	35	2	35	1	35	0	0	0	0
	point2	2											
W San Bernardino Ave w of 2nd Ave	point54	54	1322	97	30	2	30	1	30	0	0	0	0
	point4	4											
W San Bernardino Ave w of Brnca	point50	50	1148	97	35	2	35	1	35	0	0	0	0
	point55	55	1148	97	35	2	35	1	35	0	0	0	0
	point25	25											
3rd Avenue n of W San Bernardino Ave	point63	63	44	97	25	2	25	1	25	0	0	0	0
	point64	64											

INPUT: RECEIVERS
8817.0006

Dudek						22 May 2019					
MG						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:		8817.0006									
RUN:		Covina Hassen A (Twnhms) FwP Onsite									
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
R6 - Onsite A adj to Citrus Ave 2nd Flr	19	1	3,432.3	2,861.8	575.00	15.00	0.00	66	10.0	8.0	Y
R7 - Onsite A adj to San Bdo Rd 2nd Flr	21	1	3,359.8	2,707.8	575.00	15.00	0.00	66	10.0	8.0	Y
R8 - Onsite A adj to Third Ave 2nd Flr	22	1	2,861.0	2,762.5	575.00	15.00	0.00	66	10.0	8.0	Y
R6 - Onsite A adj to Citrus Ave 3rd Flr	25	1	3,432.3	2,861.8	575.00	25.00	0.00	66	10.0	8.0	Y
R7 - Onsite A adj to San Bdo Rd 3rd Flr	26	1	3,359.8	2,707.8	575.00	25.00	0.00	66	10.0	8.0	Y
R8 - Onsite A adj to Third Ave 3rd Flr	27	1	2,860.9	2,762.5	575.00	25.00	0.00	66	10.0	8.0	Y
R6 - Onsite A adj to Citrus Ave 4th Flr	29	1	3,432.3	2,861.4	575.00	35.00	0.00	66	10.0	8.0	Y
R7 - Onsite A adj to San Bdo Rd 4th Flr	30	1	3,359.8	2,707.8	575.00	35.00	0.00	66	10.0	8.0	Y

RESULTS: SOUND LEVELS
8817.0006

Dudek													
MG													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:													
BARRIER DESIGN:													
ATMOSPHERICS:													
Receiver													
Name	No.	#DUs	Existing	No Barrier						With Barrier			
			LAeq1h	LAeq1h			Increase over existing	Type		Calculated	Noise Reduction		
				Calculated	Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA		dB	dB		dBA	dB	dB	dB
R6 - Onsite A adj to Citrus Ave 2nd Flr	19	1	0.0	65.0	66		65.0	10	----	65.0	0.0	8	-8.0
R7 - Onsite A adj to San Bdo Rd 2nd Flr	21	1	0.0	65.0	66		65.0	10	----	65.0	0.0	8	-8.0
R8 - Onsite A adj to Third Ave 2nd Flr	22	1	0.0	59.3	66		59.3	10	----	59.3	0.0	8	-8.0
R6 - Onsite A adj to Citrus Ave 3rd Flr	25	1	0.0	64.7	66		64.7	10	----	64.7	0.0	8	-8.0
R7 - Onsite A adj to San Bdo Rd 3rd Flr	26	1	0.0	65.0	66		65.0	10	----	65.0	0.0	8	-8.0
R8 - Onsite A adj to Third Ave 3rd Flr	27	1	0.0	59.5	66		59.5	10	----	59.5	0.0	8	-8.0
R6 - Onsite A adj to Citrus Ave 4th Flr	29	1	0.0	64.5	66		64.5	10	----	64.5	0.0	8	-8.0
R7 - Onsite A adj to San Bdo Rd 4th Flr	30	1	0.0	64.8	66		64.8	10	----	64.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		8	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								