



## APPENDIX H

# NOISE MODELING RESULTS



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# Noise Measurement Survey – 24 HR

Project Number: CCP1603.11

Test Personnel: Corey Knips

Project Name: Citrus Square - Cypress

Equipment: Larson Davis Spark 706RC

Site Number: LT-1 Date: 5/12/21

Time: From 3:00 p.m. To 3:00 p.m.

Site Location: 9470 Moody Street, on a light pole next to the sidewalk near Moody Street.

Primary Noise Sources: Traffic on Moody Street

Comments:

Photo:



# Noise Measurement Survey – 24 HR

Project Number: CCP1603.11

Test Personnel: Corey Knips

Project Name: Citrus Square - Cypress

Equipment: Larson Davis Spark 706RC

Site Number: LT-2 Date: 5/12/21

Time: From 3:00 p.m. To 3:00 p.m.

Site Location: 5081 Orange Avenue, approximately 20 feet from the edge of the outside lane of Orange Avenue, on a tree.

Primary Noise Sources: Traffic on Orange Avenue

Comments: \_\_\_\_\_

Photo:



Project Number: CCP1603.11  
Project Name: Citrus Square - Cyprus  
Test Personnel: Corey Knips

## Noise Measurement Survey

Site Number: ST-1 Date: 5/12/21 Time: From 2:16 p.m. To 2:36 p.m.

Site Location: East edge of project site, 16 feet from the eastern wall.

Primary Noise Sources: Traffic on Orange Avenue and faint aircraft noise.

### Measurement Results

	dBA
L <sub>eq</sub>	49.9
L <sub>max</sub>	62.8
L <sub>min</sub>	101.5
L <sub>peak</sub>	43.0
L <sub>2</sub>	54.4
L <sub>8</sub>	52.3
L <sub>25</sub>	50.5
L <sub>50</sub>	48.8
L <sub>90</sub>	46.0
L <sub>99</sub>	44.6
SEL	80.7

Comments: Existing wall height is 5 feet. The louder aircraft flyover events were filtered out.

Equipment: Larson Davis 831 SLM

### Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)	Comments
6.8	2.2	79.5	49.0	

Photo:



Project Number: CCP1603.11  
Project Name: Citrus Square - Cyprus  
Test Personnel: Corey Knips

## Noise Measurement Survey

Site Number: ST-2 Date: 5/12/21 Time: From 2:46 p.m. To 3:06 p.m.

Site Location: North edge of the project site, 15 feet south of the wall.

Primary Noise Sources: Traffic on Moody Street.

### Measurement Results

	dBA
L <sub>eq</sub>	47.9
L <sub>max</sub>	58.9
L <sub>min</sub>	41.6
L <sub>peak</sub>	102.3
L <sub>2</sub>	52.5
L <sub>8</sub>	50.4
L <sub>25</sub>	48.8
L <sub>50</sub>	47.1
L <sub>90</sub>	43.9
L <sub>99</sub>	42.5
SEL	78.6

Comments: Existing wall height is 6 feet. Aircraft flyover events were filtered out. Base elevation at the measurement location was approximately 1 foot higher than the base elevation at the wall, so that the relative height of the wall was approximately 5 feet.

Equipment: Larson Davis 831 SLM

### Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)	Comments
9.2	3.2	79.4	51.0	

Photo:



TABLE Existing-01  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Denni to Moody  
NOTES: - Existing

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 8270      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	56.7	117.3	250.3

TABLE Existing-02  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Moody to Grindlay  
NOTES: - Existing

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 10510      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.33

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	67.5	138.0	293.8

TABLE Existing-03  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Grindlay to Walker  
NOTES: - Existing

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 11720      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.80

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	72.0	148.1	315.7

TABLE Existing-04  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Moody Street from Lincoln to Orange  
NOTES: - Existing

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 17510      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.54

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	91.9	192.5	412.1

TABLE Existing-05  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Moody Street from Orange to Ball  
NOTES: - Existing

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 15060      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	83.7	174.4	372.9

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TABLE Existing Plus Project-01  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Denni to Moody  
NOTES: - Existing Plus Project

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 8280      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.72

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	56.8	117.4	250.5

TABLE Existing Plus Project-02  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Moody to Grindlay  
NOTES: - Existing Plus Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 10560      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	67.7	138.4	294.7

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TABLE Existing Plus Project-03  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Grindlay to Walker  
NOTES: - Existing Plus Project

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 11770      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	72.2	148.5	316.6

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TABLE Existing Plus Project-04  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Moody Street from Lincoln to Orange  
NOTES: - Existing Plus Project

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 17610      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.57

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	92.2	193.2	413.7

TABLE Existing Plus Project-05  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Moody Street from Orange to Ball  
NOTES: - Existing Plus Project

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 15100      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.90

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	83.8	174.7	373.5

TABLE Buildout-01  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Denni to Moody  
NOTES: - Buildout

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 0      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 24.54

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

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TABLE Buildout-02  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Moody to Grindlay  
NOTES: - Buildout

\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 21250      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	103.7	218.6	468.7

TABLE Buildout-03  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Orange Avenue from Grindlay to Walker  
NOTES: - Buildout

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 0      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 24.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

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TABLE Buildout-04  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Moody Street from Lincoln to Orange  
NOTES: - Buildout

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 31900      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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65.9	134.4	285.9	614.1

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TABLE Buildout-05  
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2021  
ROADWAY SEGMENT: Moody Street from Orange to Ball  
NOTES: - Buildout

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\* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 0      SPEED (MPH): 40      GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24      SITE CHARACTERISTICS: SOFT

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\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 24.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

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