

**Appendix G:
Noise Supporting Information**

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Project Number: 3249.0012
 Project Name: Shiloh Rd - Mixed-Use
 Test Personnel: Spencer

Sheet ___ of ___

Noise Measurement Survey

Site Number: ST-1 Date: 1/25/19 Time: From 2:45 To 3:00

Site Location: Northern portion 30 feet to center of Shiloh Road, directly across from the Worldmark sign on Shiloh Road

Primary Noise Sources: Traffic along Shiloh Road

Measurement Results

	dBA
Leq	67.5
Lmax	79.9
Lmin	47.4
L5	72.6
L10	71.3
L50	64.6
L90	53.5
Ldn	—
CNEL	—

Observed Noise Sources/Events

Time	Noise Source/Event	dBA

Comments: _____

Equipment: LXT-1
 Settings: A-Weighted Other

Measured Difference: -0.06 dBA
 Slow Fast Windscreen

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)
2 mph	—	68	—
Comments: <u>Clear, sunny day w/ no wind</u>			

Project Number: 3249.0012
 Project Name: Shiloh Mixed Use
 Test Personnel: Spencer

Sheet ___ of ___

Noise Measurement Survey

Site Number: ST-2 Date: 1/25/19 Time: From 2:25 To 2:40

Site Location: Southern boundary along Fence w/ warehouse uses to the south

Primary Noise Sources: Forklift / industry work to the south

Measurement Results

	dBA
Leq	59.0
Lmax	76.4
Lmin	42.3
L5	63.5
L10	60.3
L50	52.3
L90	46.7
Ldn	
CNEL	

Observed Noise Sources/Events

Time	Noise Source/Event	dBA
	Fire truck	75

Comments: 3 min into measurement Forklifts exited warehouse, while honking horns, and moved dumpsters, 67 db - 70 db

Equipment: LXT-1
 Settings: A-Weighted Other

Measured Difference: 0.08 dBA
 Slow Fast Windscreen

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)
2 mph	—	68	—
Comments: <u>Clear, Sunny day w/ no wind</u>			

Project Number: 3249.0012
 Project Name: Shiloh Mixed Use
 Test Personnel: Spencer

Sheet ___ of ___

Noise Measurement Survey

Site Number: ST-3 Date: 1/25/19 Time: From 1:30 To 1:45

Site Location: SE portion of site 20ft to commercial development

Primary Noise Sources: Traffic on Shiloh & Skyline Road

Measurement Results

	dB(A)
Leq	58.9
Lmax	71.6
Lmin	44.9
L5	64.3
L10	62.3
L50	56.1
L90	50.1
Ldn	—
CNEL	—

Observed Noise Sources/Events

Time	Noise Source/Event	dB(A)

Comments: _____

Equipment: LXT-1
 Settings: A-Weighted Other

Measured Difference: -0.2 dB(A)
 Slow Fast Windscreen

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)
2 mph	—	68	—
Comments: <u>Clear, Sunny day</u>			

TABLE Existing No Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - west of Skylane Boulevard
NOTES: Shiloh Mixed Use Project - Existing No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7300 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): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.67

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	107.4	230.3

TABLE Existing No Project-02
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
 ROADWAY SEGMENT: Skylane Boulevard - south of Shiloh Road
 NOTES: Shiloh Mixed Use Project - Existing No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7200 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): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.19

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	106.0	228.1

TABLE Existing No Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - Skylane Boulevard to Conde Lane
NOTES: Shiloh Mixed Use Project - Existing No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12800 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) = 65.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	75.9	156.9	334.7

TABLE Existing No Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - Conde Lane to US 101 Off-Ramp
NOTES: Shiloh Mixed Use Project - Existing No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14100 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) = 65.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	80.4	167.1	356.9

TABLE Existing Plus Project -01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020

ROADWAY SEGMENT: Shiloh Road - west of Skylane Boulevard

NOTES: Shiloh Mixed Use Project - Existing Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7700 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): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.90

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	52.7	111.2	238.5

TABLE Existing Plus Project -02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Skylane Boulevard - south of Shiloh Road
NOTES: Shiloh Mixed Use Project - Existing Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7300 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): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	107.0	230.2

TABLE Existing Plus Project -03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - Skylane Boulevard to Conde Lane
NOTES: Shiloh Mixed Use Project - Existing Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13100 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) = 65.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	76.9	159.2	339.9

TABLE Existing Plus Project -04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - Conde Lane to US 101 Off-Ramp
NOTES: Shiloh Mixed Use Project - Existing Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14300 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) = 65.66

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	81.1	168.6	360.3

TABLE Cumulative No Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020

ROADWAY SEGMENT: Shiloh Road - west of Skylane Boulevard

NOTES: Shiloh Mixed Use Project - Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9900 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): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.99

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	61.9	131.3	281.9

TABLE Cumulative No Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Skylane Boulevard - south of Shiloh Road
NOTES: Shiloh Mixed Use Project - Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8400 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): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	54.8	117.4	252.7

TABLE Cumulative No Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - Skylane Boulevard to Conde Lane
NOTES: Shiloh Mixed Use Project - Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15700 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) = 66.07

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	85.9	179.2	383.3

TABLE Cumulative No Project-04
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
 ROADWAY SEGMENT: Shiloh Road - Conde Lane to US 101 Off-Ramp
 NOTES: Shiloh Mixed Use Project - Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17900 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) = 66.64

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	93.1	195.3	418.2

TABLE Cumulative Plus Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - west of Skylane Boulevard
NOTES: Shiloh Mixed Use Project - Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10300 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): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.16

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	63.5	134.8	289.5

TABLE Cumulative Plus Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Skylane Boulevard - south of Shiloh Road
NOTES: Shiloh Mixed Use Project - Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8500 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): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.91

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	55.2	118.4	254.7

TABLE Cumulative Plus Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - Skylane Boulevard to Conde Lane
NOTES: Shiloh Mixed Use Project - Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16100 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) = 66.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	87.2	182.2	389.8

TABLE Cumulative Plus Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/20/2020
ROADWAY SEGMENT: Shiloh Road - Conde Lane to US 101 Off-Ramp
NOTES: Shiloh Mixed Use Project - Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18200 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) = 66.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	94.1	197.5	422.9

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