

Appendix F. Noise Modeling Data

Appendix F1. Noise Measurement Data Sheets

Noise Measurement Data Sheet				
Conducted by: Jacobs Engineering Group			Date: Wed 6/18/2026	
Project Name: Larkspur Ferry Terminal				
Site Location: Park benches along trail opposite ferry loading Area			Site Id: ST-1	
Noise Meter Model:	Response Fast ☐ Slow ☒	Weighting A ☒ C ☐	Calibrator Model: TSI Calibrator QC-10	Calibrator @ 114.0 dBA Start: 113.9 End: 114.0
Weather Data Temp: 65°F Humidity: 68% Wind Speed: 7 mph				

Measurement Data			
Event #:	Begin Time:	End Time:	L _{eq} (dBA):
	10:26 AM	10:41 AM	62.4

Site Sketch



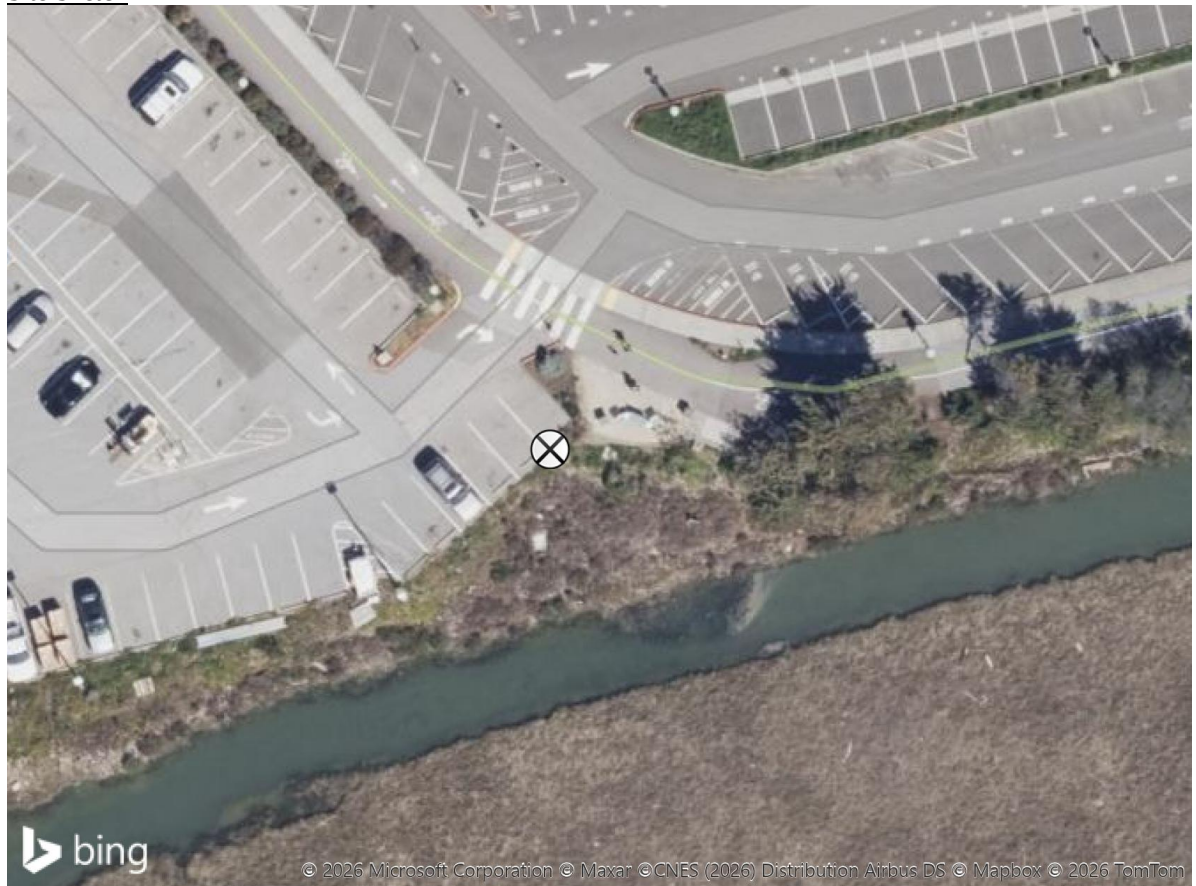
Notes

Bird noise, 9:39 pedestrian passing on cell phone, wind rustling in tress, traffic from SFD Blvd. dominant.

Noise Measurement Data Sheet				
Conducted by: Jacobs Engineering Group			Date: Wed 6/17/2026	
Project Name: Larkspur Ferry Terminal				
Site Location: Southwest corner of existing main lot, adjacent to marsh			Site Id: ST-2	
Noise Meter Model:	Response Fast ☐ Slow ☒	Weighting A ☒ C ☐	Calibrator Model: TSI Calibrator QC-10	Calibrator @ 114.0 dBA Start: 114.1 End: 114.0
Weather Data Temp: 70°F Humidity: 64% Wind Speed: 15 mph				

Measurement Data			
Event #:	Begin Time:	End Time:	L _{eq} (dBA):
	4:26 PM	4:41 PM	56.3

Site Sketch



Notes

Bird noise, wind rustling trees, cars passing in parking lot, bicycles passing, aircraft overflight @ 4:34

Noise Measurement Data Sheet				
Conducted by: Jacobs Engineering Group			Date: Wed 6/17/2026	
Project Name: Larkspur Ferry Terminal				
Site Location: West edge of existing main lot			Site Id: ST-3	
Noise Meter Model:	Response Fast ☐ Slow ☒	Weighting A ☒ C ☐	Calibrator Model: TSI Calibrator QC-10	Calibrator @ 114.0 dBA Start: 114.1 End: 114.0
Weather Data Temp: 71°F Humidity: 61% Wind Speed: 16 mph				

Measurement Data			
Event #:	Begin Time:	End Time:	L _{eq} (dBA):
	4:08 PM	4:23 PM	52.4

Site Sketch



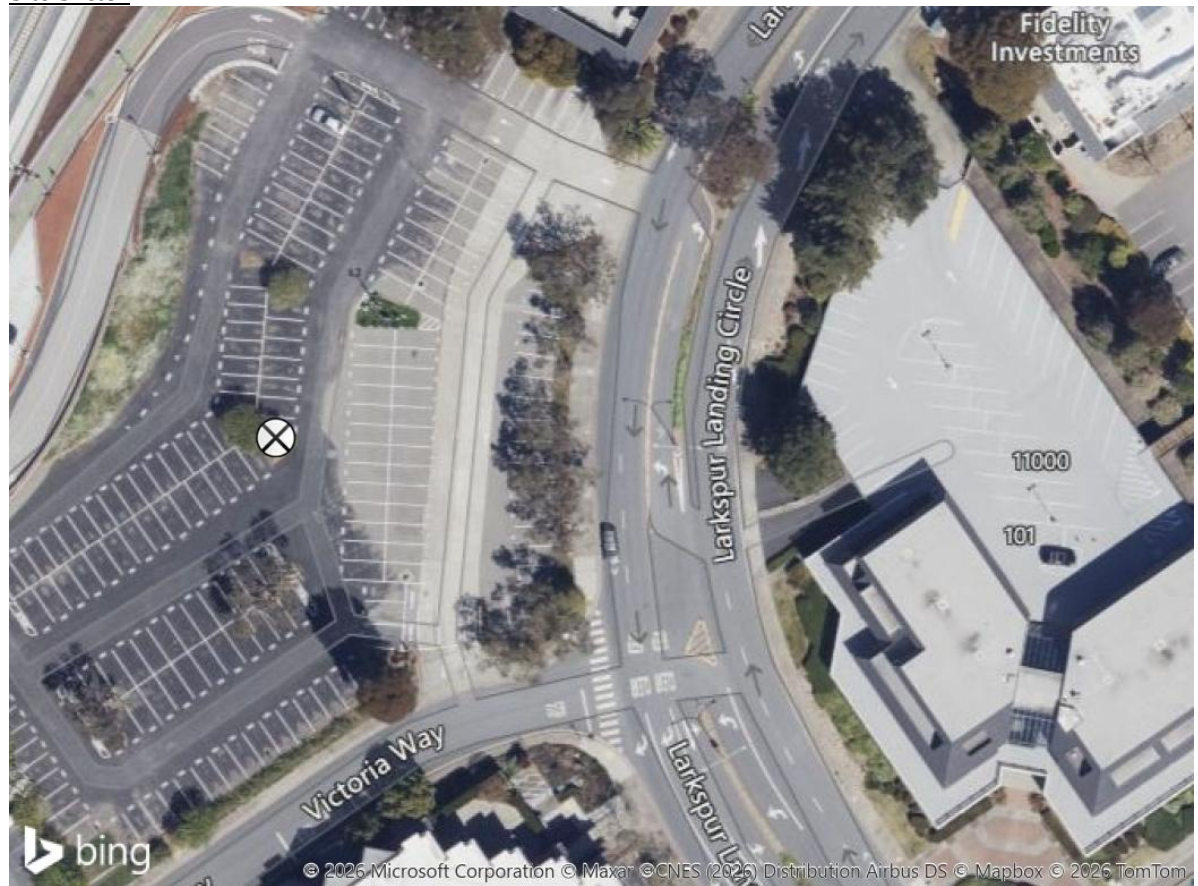
Notes

Honking on Francis Drake Blvd, bird noise, wind rustling trees, cars passing in parking lot

Noise Measurement Data Sheet				
Conducted by: Jacobs Engineering Group			Date: Wed 6/18/2026	
Project Name: Larkspur Ferry Terminal				
Site Location: Shopping Center			Site Id: ST-4	
Noise Meter Model:	Response Fast ☐ Slow ☒	Weighting A ☒ C ☐	Calibrator Model: TSI Calibrator QC-10	Calibrator @ 114.0 dBA Start: 113.9 End: 114.0
Weather Data Temp: 70°F Humidity: 63% Wind Speed: 14 mph				

Measurement Data			
Event #:	Begin Time:	End Time:	L _{eq} (dBA):
	12:12 PM	12:27 PM	62.5

Site Sketch



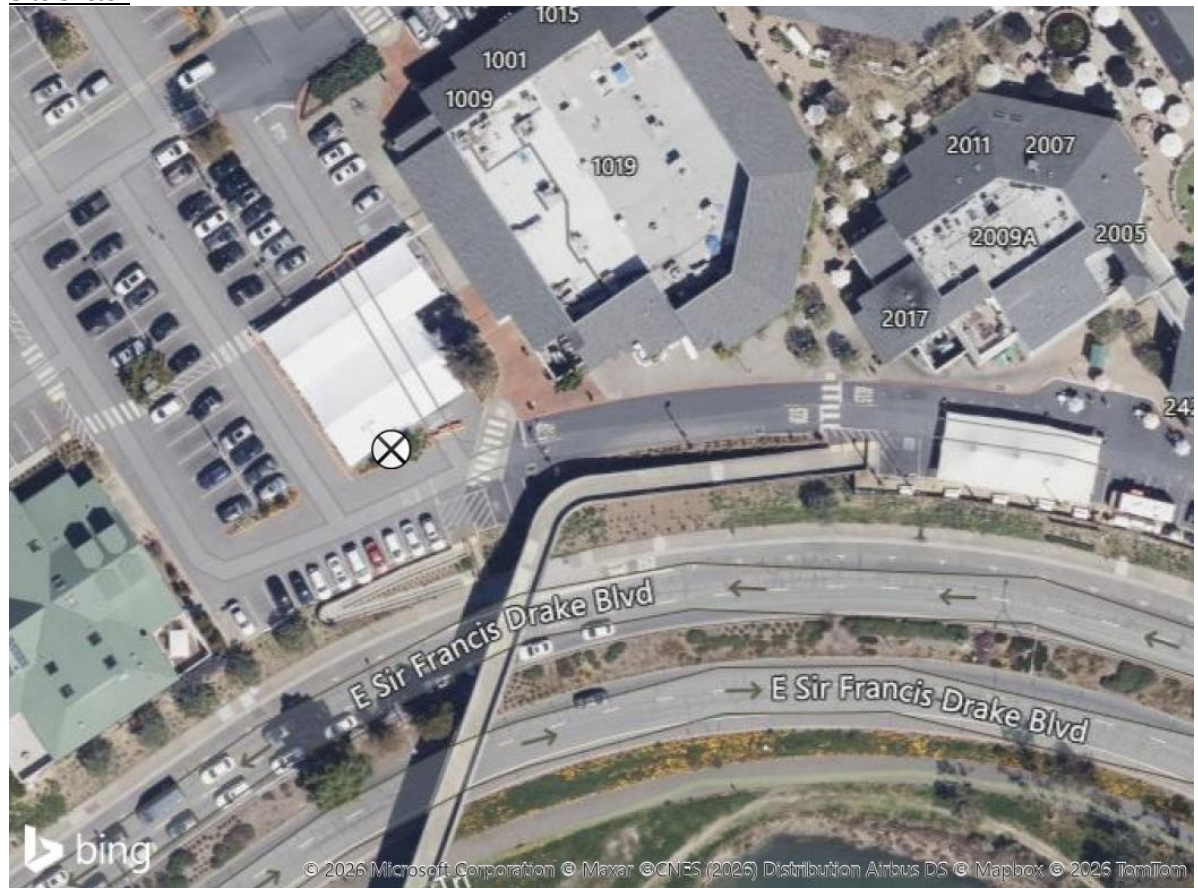
Notes

101 Freeway noise dominant, motorcycles and music audible from SFD Blvd.

Noise Measurement Data Sheet				
Conducted by: Jacobs Engineering Group			Date: Wed 6/18/2026	
Project Name: Larkspur Ferry Terminal				
Site Location: Shopping Center			Site Id: ST-5	
Noise Meter Model:	Response Fast ☐ Slow ☒	Weighting A ☒ C ☐	Calibrator Model: TSI Calibrator QC-10	Calibrator @ 114.0 dBA Start: 113.9 End: 114.0
Weather Data Temp: 67°F Humidity: 63% Wind Speed: 6 mph				

Measurement Data			
Event #:	Begin Time:	End Time:	L _{eq} (dBA):
	11:25 AM	11:47 AM	59.6

Site Sketch

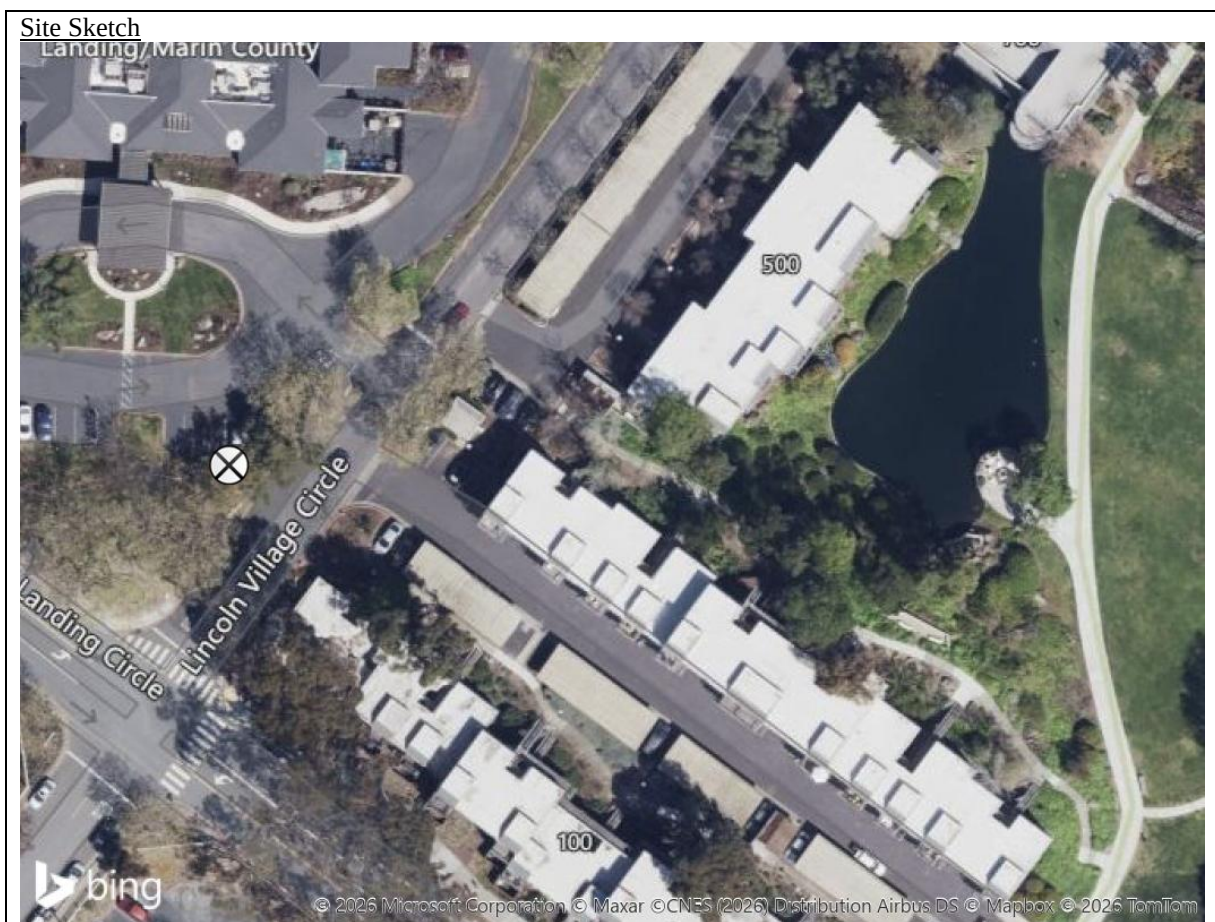


Notes

Marin Airporter stopped and loaded 11:28-32, SMART train arrival @11:32. Dogs barking in distance, pedestrians talking in parking lot

Noise Measurement Data Sheet				
Conducted by: Jacobs Engineering Group			Date: Wed 6/17/2026	
Project Name: Larkspur Ferry Terminal				
Site Location: Courtyard by Marriott/Apartment Homes			Site Id: ST-6	
Noise Meter Model:	Response Fast ☐ Slow ☒	Weighting A ☒ C ☐	Calibrator Model: TSI Calibrator QC-10	Calibrator @ 114.0 dBA Start: 114.1 End: 114.0
Weather Data Temp: 70°F Humidity: 64% Wind Speed: 15 mph				

Measurement Data			
Event #:	Begin Time:	End Time:	L _{eq} (dBA):
	4:52 PM	5:07 PM	56.8



Notes

Passing MC @ 4:52, wind rustling trees and banners, 4:56 passing pedestrians talking, cars passing in driveway, freeway noise audible/dominant

Noise Measurement Data Sheet				
Conducted by: Jacobs Engineering Group			Date: Wed 6/18/2026	
Project Name: Larkspur Ferry Terminal				
Site Location: Green Brae Brick Kiln			Site Id: ST-7	
Noise Meter Model:	Response Fast ☐ Slow ☒	Weighting A ☒ C ☐	Calibrator Model: TSI Calibrator QC-10	Calibrator @ 114.0 dBA Start: 113.9 End: 114.0
Weather Data Temp: 66°F Humidity: 68% Wind Speed: 6 mph				

Measurement Data			
Event #:	Begin Time:	End Time:	L _{eq} (dBA):
	10:55 AM	11:15 AM	55.2

Site Sketch



Notes

Bird and insect noise, HVAC nearby from 11:04-11:09 (meter paused)

Noise Measurement Data Sheet				
Conducted by: Jacobs Engineering Group			Date: Wed 6/18/2026	
Project Name: Larkspur Ferry Terminal				
Site Location: Remilliard Park			Site Id: ST-8	
Noise Meter Model:	Response Fast ☐ Slow ☒	Weighting A ☒ C ☐	Calibrator Model: TSI Calibrator QC-10	Calibrator @ 114.0 dBA Start: 113.9 End: 114.0
Weather Data Temp: 65°F Humidity: 70% Wind Speed: 7 mph				

Measurement Data			
Event #:	Begin Time:	End Time:	L _{eq} (dBA):
	9:31 AM	9:46 AM	55.4

Site Sketch



Notes

Bird noise, 9:39 pedestrian passing on cell phone, wind rustling in tress, traffic from SFD Blvd. dominant.

Appendix F2. Federal Transit Administration Calculations

version: 1/29/2019

Project: **Larkspur Ferry Terminal**

Receiver Parameters

Receiver: **Greenbrae - Closest Receptor (Existing)**
Land Use Category: **2. Residential**
Existing Noise (Measured or Generic Value): **56 dBA**

Noise Source Parameters

Number of Noise Sources: **2**

Noise Source Parameters

		Source 1
		Source Type: Stationary Source
		Specific Source: Ferry Terminal (w/ fog horn)
Daytime hrs	Avg. Number Ferry Landings/hr	2
Nighttime hrs	Avg. Number Ferry Landings/hr	0.22
Distance	Distance from Source to Receiver (ft)	750
Adjustments	Number of Intervening Rows of Buildings	0
	Noise Barrier?	No

Noise Source Parameters

		Source 2
		Source Type: Stationary Source
		Specific Source: Parking Garage
Daytime hrs	Avg. Number of Autos/hr	72.32
Nighttime hrs	Avg. Number of Autos/hr	8.04
Distance	Distance from Source to Receiver (ft)	500
Adjustments	Number of Intervening Rows of Buildings	
	Noise Barrier?	

Project Results Summary

Existing Ldn: **56 dBA**
Total Project Ldn: **32 dBA**
Total Noise Exposure: **56 dBA**
Increase: **0 dB**
Impact?: **None**

Distance to Impact Contours

Dist to Mod. Impact Contour
(Sources 1+2): **--**
Dist to Sev. Impact Contour
(Sources 1+2): **--**

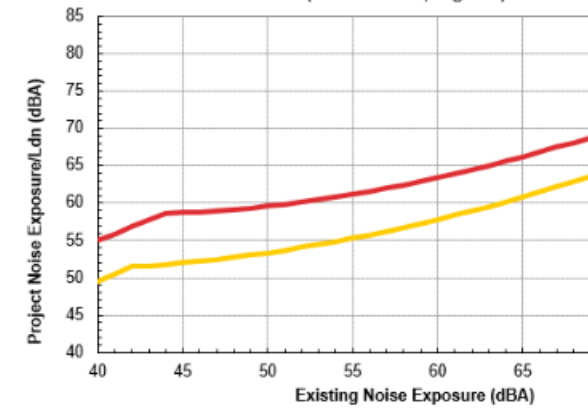
Source 1 Results

Leq(day): **32.0 dBA**
Leq(night): **22.4 dBA**
Ldn: **32.1 dBA**

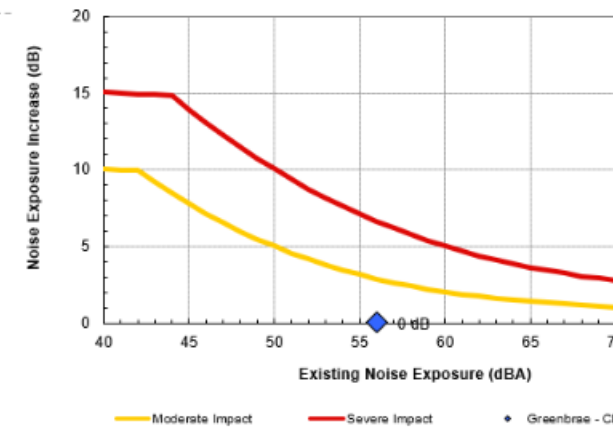
Source 2 Results

Leq(day): **20.0 dBA**
Leq(night): **10.5 dBA**
Ldn: **20.2 dBA**
Incremental Ldn (Src 1-2): **32.4 dBA**

Noise Impact Criteria
(FTA Manual, Fig 4-2)



Increase in Cumulative Noise Levels Allowed
(FTA Manual, Figs 4-3 and 4-4)



Project: Larkspur Ferry Terminal		
Receiver Parameters		
Receiver:	Greenbrae - Closest Receptor (2050)	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Value):	56 dBA	

Noise Source Parameters	
Number of Noise Sources:	2

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Ferry Terminal (w/ fog horn)
Daytime hrs	Avg. Number Ferry Landings/hr	4.67
Nighttime hrs	Avg. Number Ferry Landings/hr	0.67
Distance	Distance from Source to Receiver (ft)	750
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

Noise Source Parameters		Source 2
	Source Type:	Stationary Source
	Specific Source:	Parking Garage
Daytime hrs	Avg. Number of Autos/hr	240.63
Nighttime hrs	Avg. Number of Autos/hr	26.74
Distance	Distance from Source to Receiver (ft)	500
	Number of Intervening Rows of Buildings	
Adjustments	Noise Barrier?	

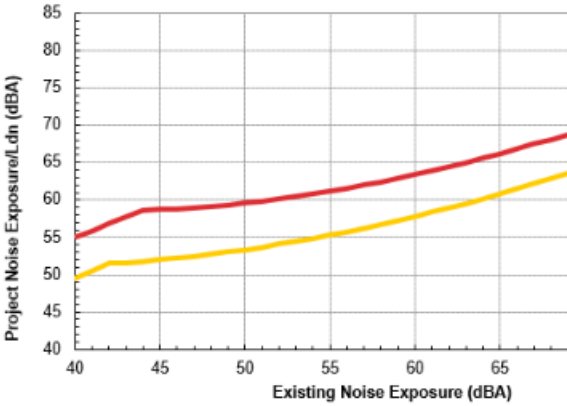
Project Results Summary	
Existing Ldn:	56 dBA
Total Project Ldn:	37 dBA
Total Noise Exposure:	56 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours	
Dist to Mod. Impact Contour (Sources 1+2):	--
Dist to Sev. Impact Contour (Sources 1+2):	--

Source 1 Results	
Leq(day):	35.7 dBA
Leq(night):	27.2 dBA
Ldn:	36.3 dBA

Source 2 Results	
Leq(day):	25.2 dBA
Leq(night):	15.7 dBA
Ldn:	25.4 dBA
Incremental Ldn (Src 1-2):	36.7 dBA

Noise Impact Criteria
(FTA Manual, Fig 4-2)



Increase in Cumulative Noise Levels Allowed
(FTA Manual, Figs 4-3 and 4-4)

