Michael Baker INTERNATIONAL

We Make a Difference

MEMORANDUM

To: NorthPoint Development

From: Darshan Shivaiah, Michael Baker International

Date: November 22, 2023

Subject: SPR 23-012 – Noise Assessment

PURPOSE

The purpose of this technical memorandum is to evaluate potential short- and long-term noise and ground-borne vibration impacts that would result from the construction and operation of the proposed SPR 23-012 Project (project), located in the City of Lancaster (City), California.

PROJECT LOCATION

The project site is in the County of Los Angeles (County), within the City of Lancaster; refer to Exhibit 1, *Regional Vicinity Map*. The City is in the Antelope Valley in northern Los Angeles County, approximately 70 miles north of downtown Los Angeles. Unincorporated Los Angeles County surrounds the City on all sides. Additional surrounding jurisdictions include unincorporated Kern County further to the north and the City of Palmdale to the south.

The project site is situated approximately 0.4-mile west of State Route 14 (SR-14). Specifically, the site is located within the northeastern corner of the intersection of Avenue G and 30th Street West. Regional access to the site is available via SR-14 at the Avenue G exit, approximately 0.4-mile east of the project site; refer to Exhibit 2, *Site Vicinity Map*. Local access to the site is provided via Avenue G and 30th Street West.

The project site consists of three parcels (Assessor's Parcel Numbers [APNs] 3114-010-002, -003, and -011).

EXISTING SITE CONDITIONS

The approximately 76.8-acre site currently consists of vacant land. No existing structures or paved roads are present on-site.

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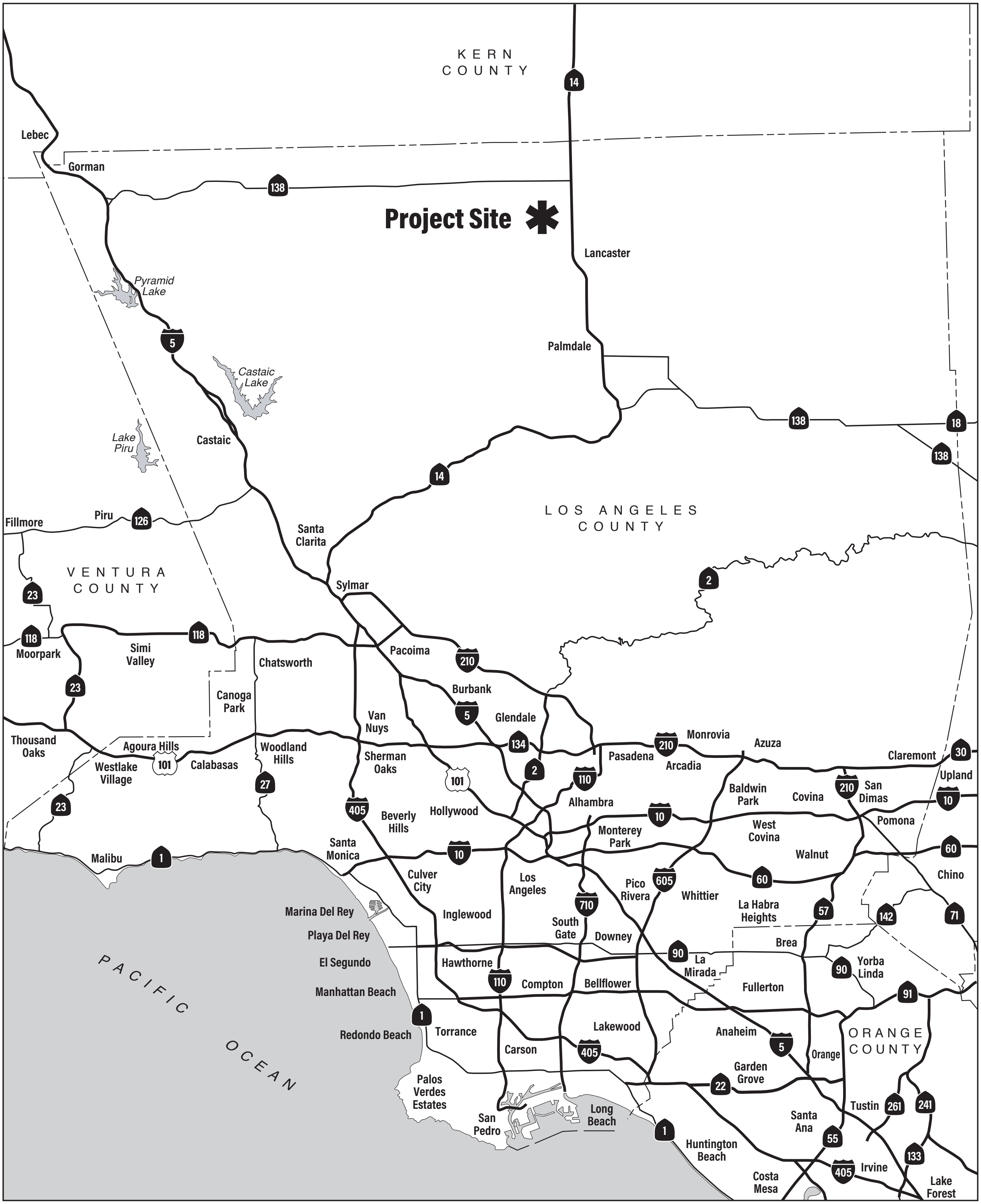

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SPR 23-012 – NOISE ASSESSMENT

Regional Vicinity

Exhibit 1

Source: Google Earth Pro, October 2023

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Site Vicinity

Exhibit 2

The project site is designated "Light Industry (LI)" with a "Specific Plan" overlay based on the *General Plan Land Use Map* in the *Lancaster General Plan 2030*.[1] The project site is zoned "SP 95-01 Fox Field Industrial Corridor Specific Plan" based on the *City of Lancaster Zoning Map*.[2] Based on the *Fox Field Industrial Corridor Specific Plan*, the project site is located within focused area "Fox Field East" and designated "Light Industrial" and "Manufacturing/Distribution (MFG)."[3]

The project site is surrounding on all sides by vacant undeveloped land. Scattered single-family residences are located further north of the site, further east is SR-14, further south is the Antelope Valley Fair and Event Center, and further west is the General William J. Fox Airfield and Apollo Community Regional Park.

PROJECT DESCRIPTION

The proposed project involves construction of a cold storage warehouse. The tilt-up concrete warehousing with elements of insulated metal panels would be approximately 1,227,596 square feet in size with approximately 40,000 square feet to be used for offices. The proposed warehouse would be approximately 50 feet in height; refer to Exhibit 3, *Site Plan*. Other ancillary improvements would include road improvements along Ave G and 30th street west, lighting and utility improvements, among others. The facility is anticipated to operate 24-hours per day. Access to the project site would be provided via two full access driveways along 30th Street West. The project would include a total of 415 trailer parking spaces and 564 passenger vehicle parking spaces. Of the 564 passenger vehicle spaces, 169 spaces would be electric vehicle (EV) parking spaces with 56 electrical charging stations installed, and 113 spaces would be made EV charging capable. The project would also include 28 bicycle parking spaces. Three total detention basins are proposed, two to the east and one to the west of the building. Additionally, approximately 21.2 acres (27.93 percent landscaping coverage of the net site area) is proposed as landscape area throughout the site.

The approximately 18-month construction is anticipated to begin in June 2024 and conclude by February 2026. Construction activities would occur from 7:00 a.m. to 8:00 p.m. Monday through Saturday. Construction activities would primarily include grading (including excavation for the detention basins), building construction, paving, and architectural coating. The project is expected to export 1,000 cubic yards of earthwork material during grading phase.

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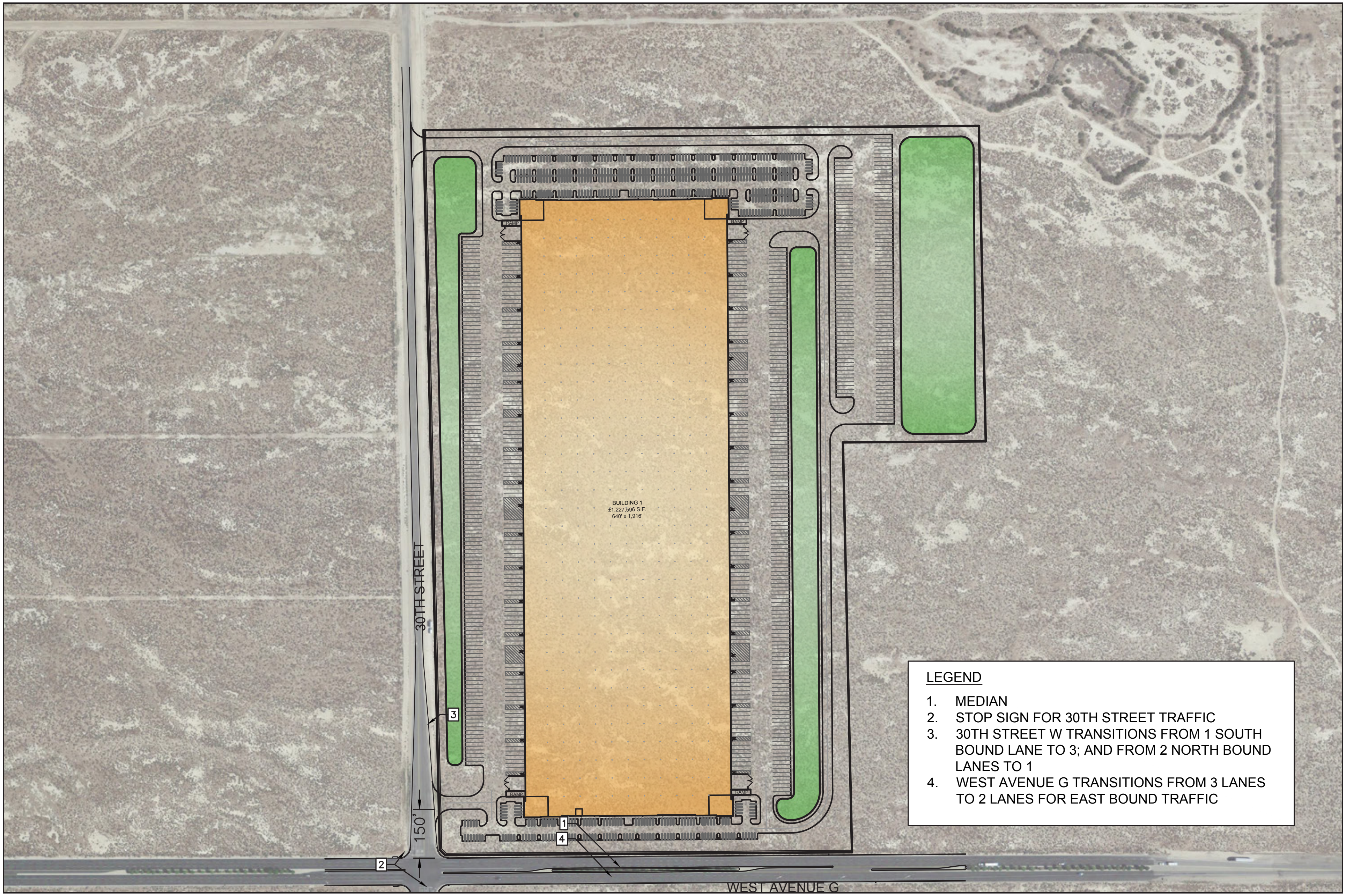
1 City of Lancaster, *Lancaster General Plan 2030, General Plan Land Use Map*, adopted July 14, 2009, updated September 1, 2015.
2 City of Lancaster, *City of Lancaster Zoning Map*, adopted July 13, 2010, revised October 26, 2022.
3 City of Lancaster, *Fox Field Industrial Corridor Specific Plan*, May 31, 1996.



Source: NorthPoint Development, October 2023

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SPR 23-012 – NOISE ASSESSMENT

Site Plan

Exhibit 3

FUNDAMENTALS OF SOUND AND ENVIRONMENTAL NOISE

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear deemphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner like the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is perceived to be twice as loud and 20 dBA higher is perceived to be four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by several sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are several metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. This is commonly used to describe the "average" noise levels within the environment. Noise exposure over a longer period is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty (or an additional 10 dBA) for sounds occurring between 10:00 p.m. and 7:00 a.m. when sounds seem to be louder. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient (background) noise conditions. Typical L_{dn} noise levels for light- and medium-density residential areas range from 55 dBA to 65 dBA. Similarly, Community Noise Equivalent Level (CNEL) is a measure of 24-hour noise levels, not an actual sound level heard at any time, that incorporates a 5-dBA penalty for sounds occurring between 7:00 p.m. and 10:00 p.m. and a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.[4]

FUNDAMENTALS OF ENVIRONMENTAL GROUNDBORNE VIBRATION

Ground vibration consists of oscillatory (i.e., rapidly fluctuating) motions or waves with an average motion of zero (i.e., no net movement of the vibration element). Sources of earth-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

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4 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. Vibration decibels (VdB) is commonly used to measure the RMS vibration velocity level. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.[5]

Table 1, *Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels*, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

Table 1
Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels

Peak Particle Velocity (inches/second)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effect on Buildings
0.006–0.019	64–74	Range of threshold of perception.	Vibrations unlikely to cause damage of any type.
0.08	87	Vibrations readily perceptible.	Recommended upper level to which ruins and ancient monuments should be subjected.
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities.	Virtually no risk of architectural damage to normal buildings.
0.2	94	Vibrations may begin to annoy people in buildings.	Threshold at which there is a risk of architectural damage to normal dwellings.
0.4–0.6	98–104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Architectural damage and possibly minor structural damage.

Source: California Department of Transportation, *Transportation Related Earthborne Vibrations,* 2002.

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities such as pile driving and vibratory compacting activities which require the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per section (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints.

[5] Ibid.

EXISITNG SETTING

Noise Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The nearest sensitive receptor to the project site is an existing single-family residential use located approximately 1,990 feet to the north of the project site. Other sensitive receptors in the vicinity of the project include a park (Apollo Community Regional Park), located approximately 4,070 feet to the west of the project site.

Stationary Sources

Land uses in the project area are mostly vacant lands and industrial use. The primary sources of stationary noise in the project vicinity are urban-related activities (i.e., mechanical equipment, airport and parking areas). The noise associated with these sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise.

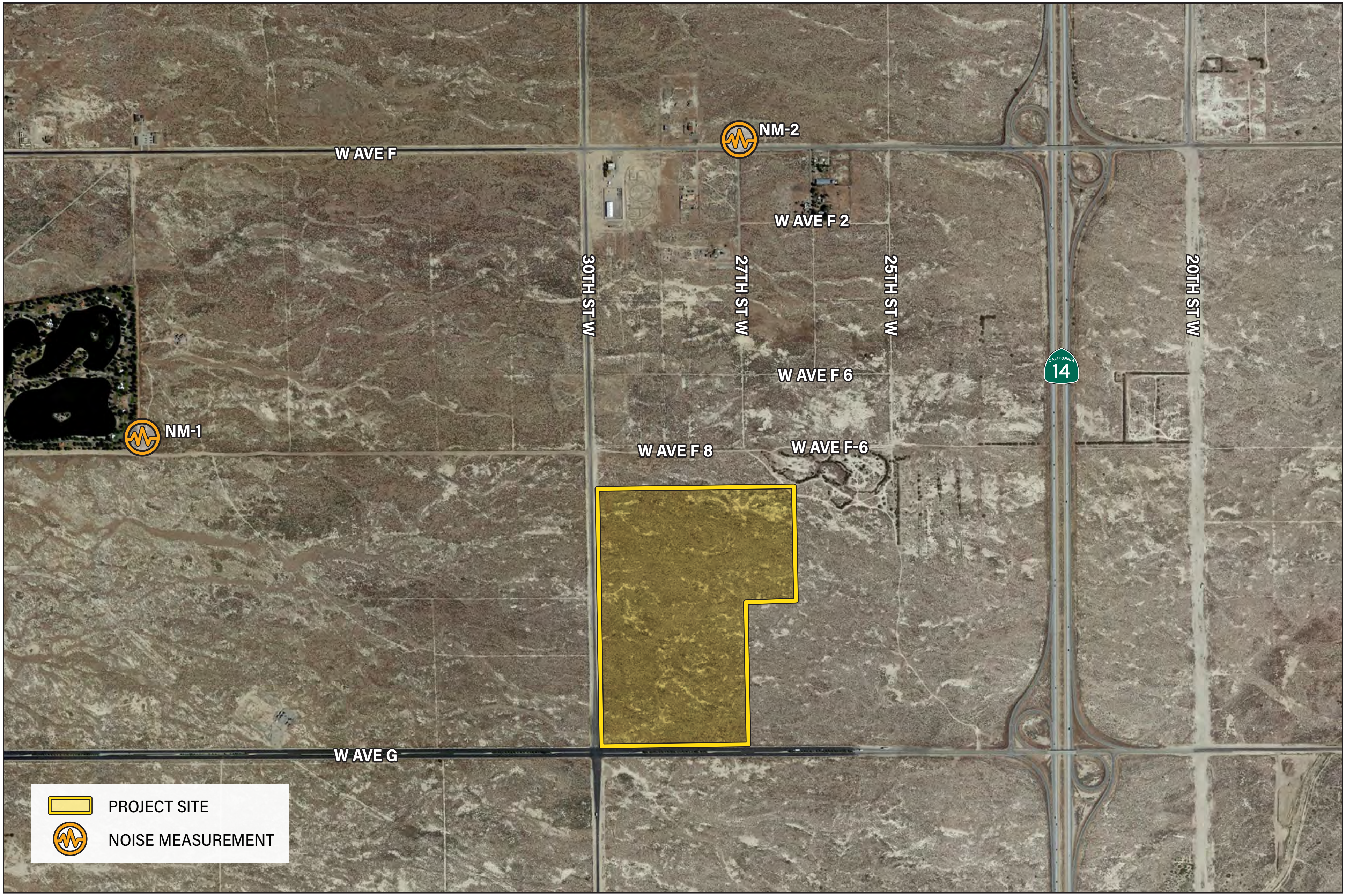
Mobile Sources

Most of the existing noise in the project area is generated from traffic along surrounding roadways including SR-14, West Avenue G, and 30th Street West.

Existing Ambient Noise Levels

To quantify existing ambient noise levels in the project area, Michael Baker International conducted three short-term noise measurements in the project vicinity on September 28, 2023. The noise measurement locations are shown in Exhibit 4, *Noise Measurement Locations*, and are representative of typical existing noise exposure at the nearest sensitive receptors. The 10-minute measurements were taken between 10:30 a.m. and 11:30 a.m. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the day. The noise measurements were taken during “off-peak” (9:00 a.m. through 3:00 p.m.) traffic noise hours as this provides a more conservative baseline. During rush hour traffic, vehicle speeds and heavy truck volumes are often low. Free-flowing traffic conditions just before or after rush hour often yield higher noise levels.[6] The noise levels measured near the project site is identified in Table 2, *Noise Measurements*.

[6] California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.



Source: Google Earth Pro, October 2023

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Noise Measurement Locations

Exhibit 4

Table 2
Noise Measurements

Site No.	Location	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	Start Time
1	Southeast Corner of Apollo Community Regional Park- Southern Parking Lot	37.9	28.5	55.3	10:55 a.m.
2	Southwest corner of West Avenue F and 27th Street West	61.9	31.7	85.5	11:16 a.m.
Refer to Appendix A, *Noise Data*, for the results of the field measurements.					

Meteorological conditions were clear, warm temperatures (79 degrees Fahrenheit [°F]), and wind speeds of approximately 8 mile per hour. Measured noise levels during the daytime measurements ranged from 37.9 to 61.9 dBA L_{eq}. The sources of peak noise include traffic along the roadways and overhead airplane noise. Noise monitoring equipment used for the ambient noise survey consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a Type 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for Type I (precision) sound level meters. Refer to Appendix A, *Noise Data*, for the results of the field measurement.

REGULATORY SETTING

Environmental noise and vibration are controlled and regulated by federal, state, and local agencies. Federal agencies like the U.S. Environmental Protection Agency (EPA) are responsible for managing major noise sources in commerce including transportation vehicles and equipment, machinery, appliances under the Noise Control Act of 1972.[7] However, the primary responsibility of addressing noise issues is with the State and local governments.[8]

State

State Office of Planning and Research

The State Office of Planning and Research's (OPR) *Noise Element Guidelines* include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The *Noise Element Guidelines* contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

7 U.S. Environmental Protection Agency, *Summary of the Noise Control Act: 42 USC Section 4901 et seq.,* 1972, https://www.epa.gov/laws-regulations/summary-noise-control-act, accessed September 20, 2023.

8 U.S. Environmental Protection Agency, *Clean Air Act Title IV – Noise Pollution*, https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution, accessed September 20, 2023.

Local

Lancaster General Plan 2030

The *Lancaster General Plan 2030* (General Plan) was adopted on July 14, 2009, and the horizon year for the adopted General Plan is 2030. The General Plan contains the vision, goals, objectives, policies, and specific actions for the City. The General Plan includes the following elements or plans: natural environment, public health and safety, active living, physical mobility, municipal services and facilities, economic development and vitality and physical development. The following objectives and policies related from the General Plan that would be applicable to the project:

Objective 4.3: Promote noise compatible land use relationships by implementing the noise standards identified in Table 3-1 (Table 3, *Noise Compatible Land Use Objectives*, below) to be utilized for design purposes in new development, and establishing a program to attenuate existing noise problem[s].

Table 3
Noise Compatible Land Use Objectives

Land Use Category	Maximum Exterior CNEL	Maximum Interior CNEL
Rural, Single-Family, Multiple-Family Residential	65 dBA	45 dBA
Schools:		
Classrooms	65 dBA	45 dBA
Playgrounds	70 dBA	-
Libraries	-	50 dBA
Hospitals/Convalescent Facilities:		
Living Areas	-	50 dBA
Sleeping Areas	-	40 dBA
Commercial and Industrial	70 dBA	-
Office Areas	-	50 dBA
Source: City of Lancaster, *Lancaster General Plan 2030*, July 14, 2009.		

Policy 4.3.1: Ensure that noise-sensitive land uses and noise generators are located and designed in such a manner that City noise objectives will be achieved.

Policy 4.3.2: Wherever feasible, manage the generation of single event noise levels (SENL) from motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities such that SENL levels are no greater than 15 dBA above the noise objectives included in the Plan for Public Health and Safety.

Policy 4.3.3: Ensure that the provision of noise attenuation does not create significant negative visual impacts.

Lancaster Municipal Code

The most effective method to control community noise impacts from non-transportation noise sources (such as playgrounds, trash compactors, air-conditioning units, etc.) is through the application of a community noise ordinance. For the purpose of this analysis, the noise impacts associated with the project are controlled by General Plan 2030 Plan for Public Health and Safety, and the permitted hours of construction activity are established in the Lancaster Municipal Code.

The City of Lancaster has set restrictions with respect to the hours during which construction activity may take place. Municipal Code Section 8.24.040, *Loud, unnecessary and unusual noises prohibited - Construction and Building,* indicates that *"…a person at any time on Sunday or any day between the hours of 8:00 p.m. and 7:00 a.m. shall not perform any construction or repair work of any kind upon any building or structure or perform any earth excavating, filling or moving where any of the foregoing entails the use of any air compressor, jack hammer, power-driven drill, riveting machine, excavator, diesel-powered truck, tractor or other earth moving equipment, hard hammers on steel or iron or any other machine tool, device or equipment which makes loud noises within 500 feet of an occupied dwelling, apartment, hotel, mobile home or other place of residence."*

CALIFORNIA ENVIRONMENTAL QUALITY ACT THRESHOLDS

In accordance with the *California Environmental Quality Act* (CEQA Guidelines), project impacts are evaluated to determine whether significant adverse environmental impacts would occur. This analysis will focus on the project's potential impacts and provide mitigation measures, if required, to reduce or avoid any potentially significant impacts that are identified. According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to noise and vibration if it would:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (refer to Impact Statement NOI-1);

- Generation of excessive groundborne vibration or groundborne noise levels (refer to Impact Statement NOI-2); and/or

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels (refer to Impact Statement NOI-3).

The Federal lnteragency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (e.g., CNEL).

For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur even though the noise criteria might not be exceeded. Therefore, for the purpose of this analysis, FICON identifies a readily perceptible 5 dBA or greater project related noise level increase as a significant impact when nearby noise-sensitive receivers are affected. According to the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA barely perceptible noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if noise-sensitive receivers are affected, since it likely contributes to an existing noise exposure exceedance. Table 4, ***Significance of Noise Level Increases***, provides a summary of the potential noise impact significance criteria, based on guidance from FICON.

Table 4
Significance of Noise Level Increases

Without Project Noise Level	Potential Significant Impact
< 60 dBA	5 dBA or more
60 – 65 dBA	3 dBA or more
> 65 dBA	1.5 dBA or more
Source: Federal Interagency Committee on Noise (FICON), 1992.	

Based on the significance criteria outlined below, noise impacts shall be considered significant if any of the following occur as a direct result of the proposed project:

Construction Noise Standards

- If project-related construction activities occur at any time other than the permitted hours of 7:00 a.m. to 8:00 p.m. On weekdays, with no activity allowed on Sundays and generate noise levels which exceed the 80 dba L_{max} noise level limit at nearby sensitive receiver locations (General Plan 2030, *Plan for Public Health and Safety*, Policy 4.3.2. Permitted hours based on *Section 8.24.040* of the Municipal Code).

Operational Noise Standards

- If project-related operational (stationary-source) noise levels exceed the exterior 65 dBA L_{eq} noise level standard at nearby sensitive receiver locations (based on the exterior noise level standards in the General Plan 2030, *Plan for Public Health and Safety*; refer to Table 3 above).

- If the existing ambient noise levels at the nearby noise-sensitive receivers near the project site:
  - Are less than 60 dBA and the project creates a readily perceptible 5 dBA or greater project related noise level increase; or
  - Range from 60 to 65 dBA and the project creates a barely perceptible 3 dBA or greater project-related noise level increase; or
  - Already exceed 65 dBA, and the project creates a community noise level impact of greater than 1.5 dBA.

IMPACT ANALYSIS

NOI-1 WOULD THE PROJECT RESULT IN GENERATION OF A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES?

Level of Significance: Less Than Significant Impact.

It is difficult to specify noise levels that are generally acceptable to everyone; noise that is considered a nuisance to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels or based on studies of the ability of people to sleep, talk, or work under various noise conditions.

Construction

Construction activities generally are temporary and have a short duration, resulting in periodic increases in the ambient noise environment. Construction activities would occur over approximately 12 months and would include the following phases: grading, building construction, paving, and architectural coating. Ground-borne noise and other types of construction-related noise impacts would typically occur during the grading phases. This phase of construction has the potential to create the highest levels of noise. Typical noise levels generated by construction equipment are shown in Table 5, *Maximum Noise Levels Generated by Typical Construction Equipment*. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

Table 5
Maximum Noise Levels Generated by Typical Construction Equipment

Type of Equipment	Acoustical Use Factor[1]	L_{max} at 50 Feet (dBA)	L_{max} at 1,990 Feet (dBA)	L_{max} at 4,070 Feet (dBA)
Backhoe	40	78	46	40
Concrete Mixer Truck	40	79	47	41
Concrete Saw	20	90	58	52
Crane	16	81	49	43
Dozer	40	82	50	44
Excavator	40	81	49	43
Forklift	20	75	43	37
Generator	50	81	49	43
Grader	40	85	53	47
Loader	40	79	47	41
Paver	50	77	45	39
Roller	20	80	48	42
Tractor	40	84	52	46
Water Truck	40	75	43	37
General Industrial Equipment	50	85	53	47

Note:
1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Source: Federal Highway Administration, Roadway Construction Noise Model (*FHWA-HEP-05-054*), January 2006.

Construction noise levels in the project vicinity would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete phases, with each phase requiring different equipment with varying noise characteristics. These phases alter the characteristics of the noise environment generated on the proposed project site and in the surrounding community for the duration of the construction process.

Noise levels depicted in Table 5 represent maximum sound levels (L_{max}), which are the highest individual sound occurring at an individual time period. The nearest sensitive receptor to the project site is the existing residential use located approximately 1,990 feet to the north of the project site. At the distance of 1,990 feet, maximum construction noise levels could range between approximately 43 dBA and 58 dBA; refer to Table 5. The nearest park use is located approximately 4,090 feet to the west of the project site. At the distance of 4,090 feet, maximum construction noise levels could range between approximately 37 dBA and 52 dBA; refer to Table 5. As such, construction noise would not exceed the 80 dBA L_{max} noise level limit at nearby sensitive receiver locations (General Plan 2030, *Plan for Public Health and Safety*, Policy 4.3.2 and permitted hours based on Section 8.24.040 of the Municipal Code). Furthermore, the project would comply with the City's allowable construction hours specified in Municipal Code Section 8.24.040, *Loud, unnecessary and unusual noises prohibited - Construction and Building*, which permits construction activities between 7:00 a.m. to 8:00 p.m. Monday through Saturday. Compliance with the Municipal Code would minimize impacts from construction noise, as construction would be limited to the permitted times. Therefore, a less than significant noise impact would occur in this regard.

Operations

Off-Site Mobile Noise

Future development generated by the proposed project would result in some additional traffic on adjacent roadways, thereby potentially increasing vehicular noise in the vicinity of existing and proposed land uses. The most prominent source of mobile traffic noise in the project vicinity is along Avenue F and SR-14. According to the California Department of Transportation (Caltrans), a doubling of traffic (100 percent increase) on a roadway would result in a perceptible increase in traffic noise levels (3 dBA).[9] According to the *Fox Field Commerce Center – East Trip Generation Estimates* (Trip Generation Table), prepared by Fehr & Peers, dated November 2023, the proposed warehouse would generate approximately 2,603 total daily trips. The nearest sensitive receptors are located along the West Avenue F. Based on the *Lancaster Master Plan of Complete Streets*, City of Lancaster[10], the future 2035 ADT along West Avenue F would be approximately 8,640. As such, the project-related increase in traffic volume (2,603) would represent 30 percent of the future project volumes along this roadway. As the project would not result in a perceptible increase traffic noise level (less than 100 percent) and an increase in traffic noise along local roadways near the sensitive receptors would be imperceptible. Project-related traffic noise impacts would be less than significant.

On-Site Operational Noise

The proposed cold storage warehouse building is being designed and built on a speculative basis with the intended function as a short-term storage warehouse, operating up to 24 hours a day, seven days a week. Mechanical equipment, slow-moving trucks, back-up alarms for trucks, and parking lot activities would generate noise during on-site operations. The operations would be typical of a warehousing facility.

Mechanical Equipment

HVAC units would be installed on the roof of the proposed warehouse building. Specifically, approximately 20 to 40 rooftop HVAC units are proposed on the warehouse building. Typically, mechanical equipment,

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9 California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

10 City of Lancaster, *Figure 8. 2035 ADT - Lancaster Master Plan of Complete Streets,* https://www.cityoflancasterca.org/home/showpublisheddocument/34921/636656255820900000, accessed on November 17, 2023.

such as HVAC units, generate noise levels of 60 dBA at 20 feet from the source.[11] Noise generated by stationary sources typically attenuates at a rate of 6 dBA per doubling of distance from the source. The nearest sensitive receptor to the project site is the existing single-family residential use, located approximately 1,990 feet to the north of the project site. At this distance, noise levels from HVAC units would be approximately 20 dBA. Therefore, operation of the HVAC units would not exceed the City's daytime exterior (65 dBA) at this sensitive receptor. Further, as shown in Table 2, existing ambient noise levels near the residential use is approximately 61.9 dBA L_{eq}, which is higher than projected noise levels from HVAC units at this sensitive receptor. As such, impacts would be less than significant in this regard.

Slow-Moving Trucks

The predominant noise source during on-site operations would be from on-site truck movements and idling. Typically, slow movements from these trucks can generate a maximum noise level of approximately 79 dBA at 50 feet.[12] The nearest sensitive receptor to the project site is the existing single-family residential use, located approximately 1,990 feet to the north of the project site. At this distance, noise levels from slow-moving trucks would be approximately 47 dBA. Therefore, operation of the slow-moving trucks would not exceed the City's daytime exterior (65 dBA) noise standards at this sensitive receptor. Further, as shown in Table 2, existing ambient noise levels at the existing single-family residential use is approximately 61.9 dBA L_{eq}, which is higher than projected noise levels from slow-moving trucks at this sensitive receptor. As such, impacts would be less than significant in this regard.

Back-Up Alarms

A total of 415 trailer parking stalls are proposed on-site for the proposed project along the eastern and western project boundaries, including a total of 54 loading docks would be provided along the northeastern boundaries of the proposed project site. Medium- and heavy-duty trucks reversing into truck loading docks and parking stalls would produce noise from back-up alarms (also known as back-up beepers). Back-up beepers produce a typical volume of 97 dBA at one meter (i.e., 3.28 feet) from the source.[13] The nearest sensitive receptor to the project site is the existing single-family residential use, located approximately 1,990 feet to the north of the project site. At this distance, noise levels from back-up beepers would be approximately 41 dBA. Therefore, operation of the back-up beepers would not exceed the City's daytime exterior (65 dBA) noise standards at this sensitive receptor. Further, as shown in Table 2, existing ambient noise levels at the existing single-family residential use is approximately 61.9 dBA L_{eq}, which is higher than projected noise levels from back-up beepers at this sensitive receptor. As such, impacts would be less than significant in this regard.

Parking Areas

A total of 564 surface parking spaces would be provided for employees and visitors. Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-byes may be an annoyance to

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11 Elliot H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, July 26, 2015.

12 Ibid.

13 Environmental Health Perspectives, *Vehicle Motion Alarms: Necessity, Noise Pollution, or Both?* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3018517/, accessed September 20, 2023.

nearby noise-sensitive receptors. Estimates of the maximum noise levels associated with some parking lot activities are presented in Table 6, *Typical Maximum Noise Levels Generated by Parking Lots*.

Table 6
Typical Maximum Noise Levels Generated by Parking Lots

Noise Source	Maximum Noise Levels at 50 Feet from Source
Car door slamming	61 dBA L_{eq}
Car starting	36 dBA L_{eq}
Car idling	53 dBA L_{eq}
Source: Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, Noise Navigator Sound Level Database with Over 1700 Measurement Values, June 26, 2015	

As shown in Table 6, parking lot activities can result in noise levels up to 61 dBA at a distance of 50 feet. It is noted that parking lot noise are instantaneous noise levels compared to noise standards in the CNEL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower than the ambient noise levels identified in Table 2. The proposed parking lot would have intermittent parking lot noise due to the movement of vehicles. The nearest sensitive receptor (existing single-family residential use) would be located approximately 1,990 feet from the project site. At the distance of 1,990 feet, noise from parking activities would not be audible and is not anticipated to exceed City's daytime exterior (65 dBA) noise standards, or the existing ambient noise level; refer to Table 2. Therefore, noise associated with parking activities would result in less than significant impacts.

Mitigation Measures: No mitigation is required.

NOI-2 WOULD THE PROJECT RESULT IN EXPOSURE OF PERSONS TO OR GENERATION OF EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS?

Level of Significance: Less Than Significant Impact.

Construction

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The Caltrans *Transportation and Construction Vibration Manual* identifies various vibration damage criteria for different building classes. This evaluation uses the Caltrans architectural damage criterion for continuous vibrations at new residential and commercial structure buildings of 0.5 inch-per-second (inch/second) PPV. The types of construction vibration impacts include human annoyance and building damage. Annoyance is assessed based on levels of perception, with a PPV of 0.01 inch/second being considered "barely perceptible," 0.04 inch/second as "distinctly perceptible," 0.1 inch/second as "strongly perceptible," and 0.4 inch/second as "severe." Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time.

Construction of the proposed project would occur over approximately 18 months and would include grading, paving, building construction, and architectural coatings. The highest degree of groundborne vibration would be generated due to the operation of vibratory rollers during the paving phase. As previously mentioned, there are no sensitive receptor buildings located in the immediate vicinity of the project site and the nearest sensitive receptor is located at approximately 1,990 feet to the north of the project site. As such, vibration impacts are analyzed at 1,990 feet to evaluate the architectural building damage criterion. Groundborne vibration decreases rapidly with distance. As a result, vibration velocities from the construction equipment would be barely precipitable at this distance. Typical vibration produced by construction equipment is illustrated in Table 7, *Typical Vibration Levels for Construction Equipment*.

Table 7
Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inch/sec)	Approximate peak particle velocity at 1,990 feet (inch/sec)[1]
Large bulldozer	0.089	0.0001
Loaded trucks	0.076	0.0001
Small bulldozer	0.003	<0.0001
Vibratory Rollers	0.210	0.0003

Notes:
1. Calculated using the following formula:
$PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$
where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance
PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines*
D = the distance from the equipment to the receiver

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020.

As indicated in Table 7, vibration velocities from typical heavy construction equipment operation would range from 0.003 to 0.21 inch/second PPV at 25 feet from the source of activity. The nearest structure to the project site is the existing single-family residential building located approximately 1,990 feet to the north of the project site. Vibration level during the operation of construction equipment would be approximately less than 0.0001 inch/second PPV to 0.0003 inch/second PPV at 1,990 feet; refer to Table 7. As a result, construction groundborne vibration would not be capable of exceeding the 0.50 inch/second PPV significance threshold for vibration to the nearest structures and a less than significant impact would occur in this regard.

Long-Term Operational Vibration Impacts

The project would involve operation of a warehouse building and would not generate groundborne vibration that could be felt by the nearest sensitive receptors. As indicated in Table 7, vibration velocities from the operation of trucks would be approximately 0.0001 inch/second PPV and are not capable of exceeding the 0.50 inch/second PPV significance threshold for vibration at the nearest sensitive receptor located at 1,990 feet to the north of the project site. The project operation would not involve railroads operation and therefore would not result in vibration impacts at surrounding uses. Thus, no impact would occur in this regard.

Mitigation Measures: No mitigation is required.

NOI-3 FOR A PROJECT LOCATED WITHIN THE VICINITY OF A PRIVATE AIRSTRIP OR AN AIRPORT LAND USE PLAN OR, WHERE SUCH A PLAN HAS NOT BEEN ADOPTED, WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT, WOULD THE PROJECT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS?

Level of Significance: Less Than Significant Impact.

The proposed project site is located within an airport land use plan and within two miles of a public airport or public use airport. The nearest airport to the project site is the General William J. Fox Airfield, located approximately 1.3 miles to the northwest of the project site. According to the Los Angeles County Airport Land Use Commission(Los Angeles County ALUC), the project site is located within the General William J. Fox Airfield Area of Influence Compatibility Zone D.[14] According to the *General William J. Fox Airfield Land Use Compatibility Plan*, projects within Compatibility Zones D and E, proposed nonresidential development consist of 40,000 square feet or more would be considered a major land use action by the Los Angeles County ALUC and would be subject to mandatory or advisory Los Angeles County ALUC review depending upon the status of local general plan consistency. The project proposes a warehouse use and is not a land use of specific safety concerns. Further, the project would employ up to approximately 467 on-site employees[15] on the 76.8-acre site and would not exceed the established usage intensity of new nonresidential development for Zone D (a maximum of 300 people per any individual acre) in accordance with *General William J. Fox Airfield Land Use Compatibility Plan* Policy 2.3.5. Additionally, the project is not proposing any outdoor area where the employees or visitors would be exposed to the airport noise. As such, upon reviewing the Los Angeles County ALUC, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

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14 Los Angeles County Airport Land Use Commission, *Los Angeles County Airport Land Use Plan, Long Beach Airport - Airport Influence Area*, revised December 1, 2004, https://planning.lacounty.gov/assets/upl/data/pd_alup.pdf, accessed September 20, 2023.

15 Based on 0.3 employees per 1,000 feet per project Applicant.

REFERENCES

Documents

1. California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.

2. City of Lancaster, Lancaster General Plan 2030, General Plan Land Use Map, adopted July 14, 2009, updated September 1, 2015.

3. City of Lancaster, City of Lancaster Zoning Map, adopted July 13, 2010, revised October 26, 2022.

4. City of Lancaster, *Fox Field Industrial Corridor Specific Plan*, May 31, 1996.

5. City of Lancaster, *Figure 8. 2035 ADT – Lancaster Master Plan of Complete Streets,* https://www.cityoflancasterca.org/home/showpublisheddocument/34921/636656255820900000, accessed on November 17, 2023.

6. Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, July 6, 2010.

7. Environmental Health Perspectives, *Vehicle Motion Alarms: Necessity, Noise Pollution, or Both?* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3018517/, accessed September 20, 2023.

8. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

9. Fehr and Peers, *Lancaster Fox Field Commerce Center – West Local Traffic Analysis Scoping Assessment*, September 1, 2023.

10. Harris, Cyril, *Handbook of Noise Control,* 1979.

11. Los Angeles County Airport Land Use Commission, *Los Angeles County Airport Land Use Plan, Long Beach Airport - Airport Influence Area*, revised December 1, 2004, https://planning.lacounty.gov/assets/upl/data/pd_alup.pdf, accessed September 20, 2023.

12. Office of Planning and Research, *State of California General Plan Guidelines*, *Appendix D*, October 2017.

13. State Office of Planning and Research, *State of California General Plan Guidelines*, October 2017.

14. U.S. Environmental Protection Agency, *Noise Effects Handbook – A Desk Reference to Health and Welfare Effects of Noise*, October 1979 (revised July 1981).

15. U.S. EPA. Summary of the Noise Control Act: 42 USC Section 4901 et seq.(1972), https://www.epa.gov/laws-regulations/summary-noise-control-act, accessed September 20, 2023.

16. U.S. EPA. Clean Air Act Title IV – Noise Pollution, https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution, accessed September 20, 2023.

Websites / Programs

1. Google Earth, 2023.

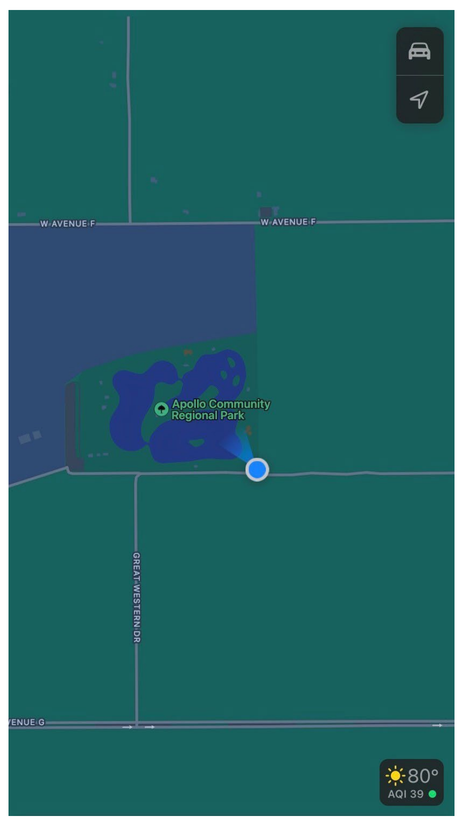
Appendix A
Noise Data

Site Number: NM-1		
Recorded By: Darshan Shivaiah, Dennis Dinh		
Job Number: 195377		
Date: 9/28/2023		
Time: 10:55 AM		
Location: Apollo Park		
Source of Ambient Noise: Overhead Plane and Wind		
Source of Peak Noise: Overhead Plane		
Noise Data		
L_{eq} (dB)	**L_{max}(dB)**	**L_{min} (dB)**
37.9	55.3	28.5

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**3011133**	**06/04/2023**	
	Microphone	**Brüel & Kjær**	**4189**	**3086765**	**06/04/2023**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**25380**	**06/04/2023**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**06/04/2023**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** Sunny
	Note: dBA Offset = 0.06		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (inches)**
	8 mph	79	29.81

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		09/28/2023 10:55:09
End Time:		09/28/2023 11:05:09
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.16

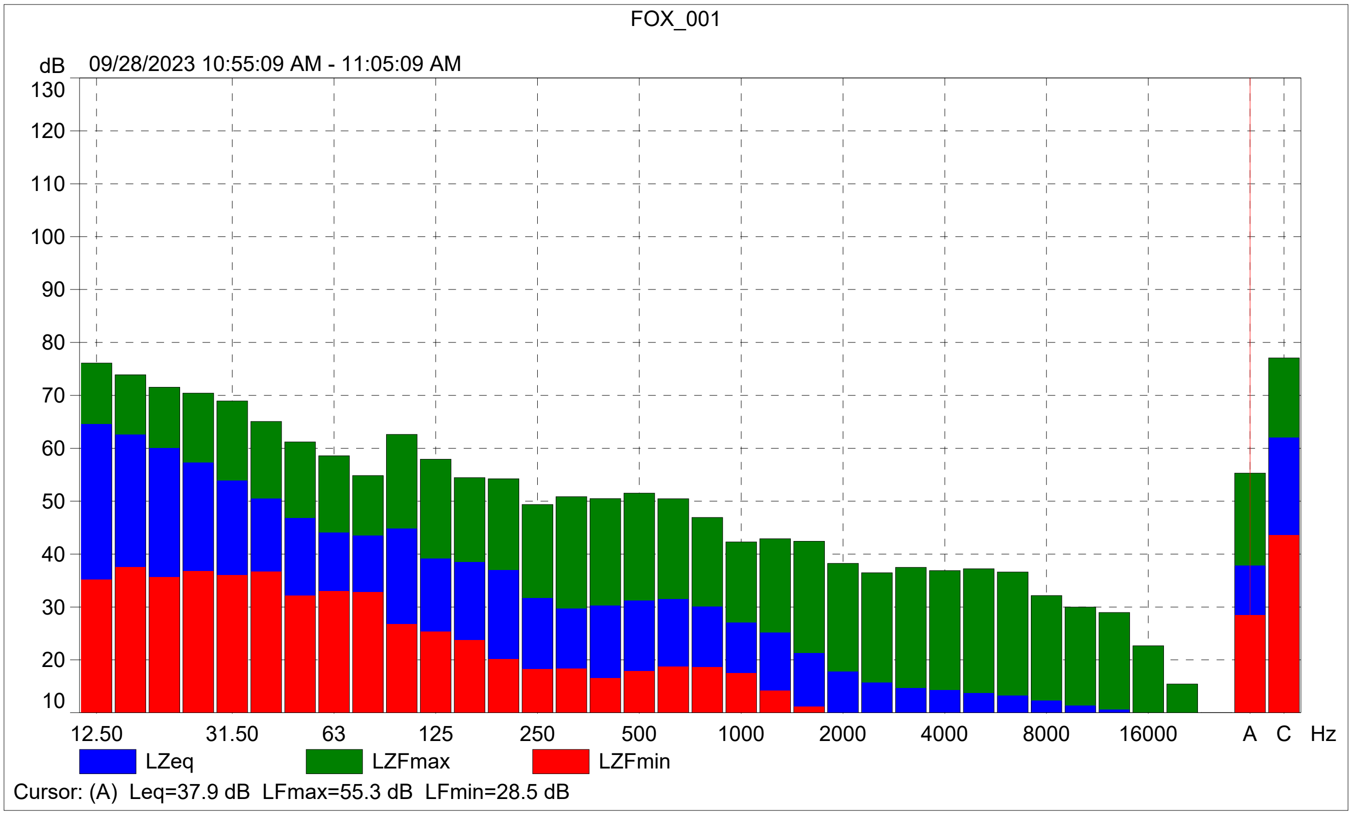
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

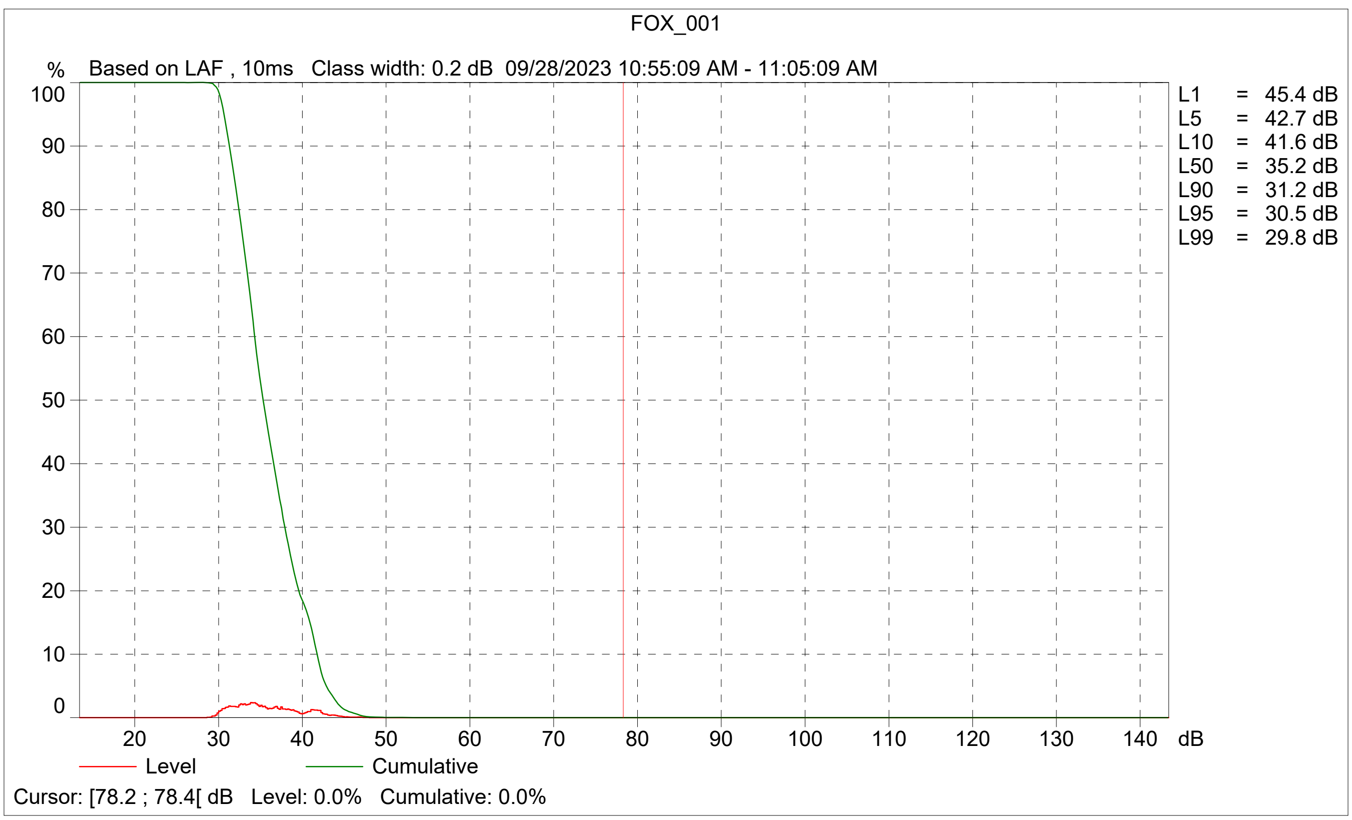
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

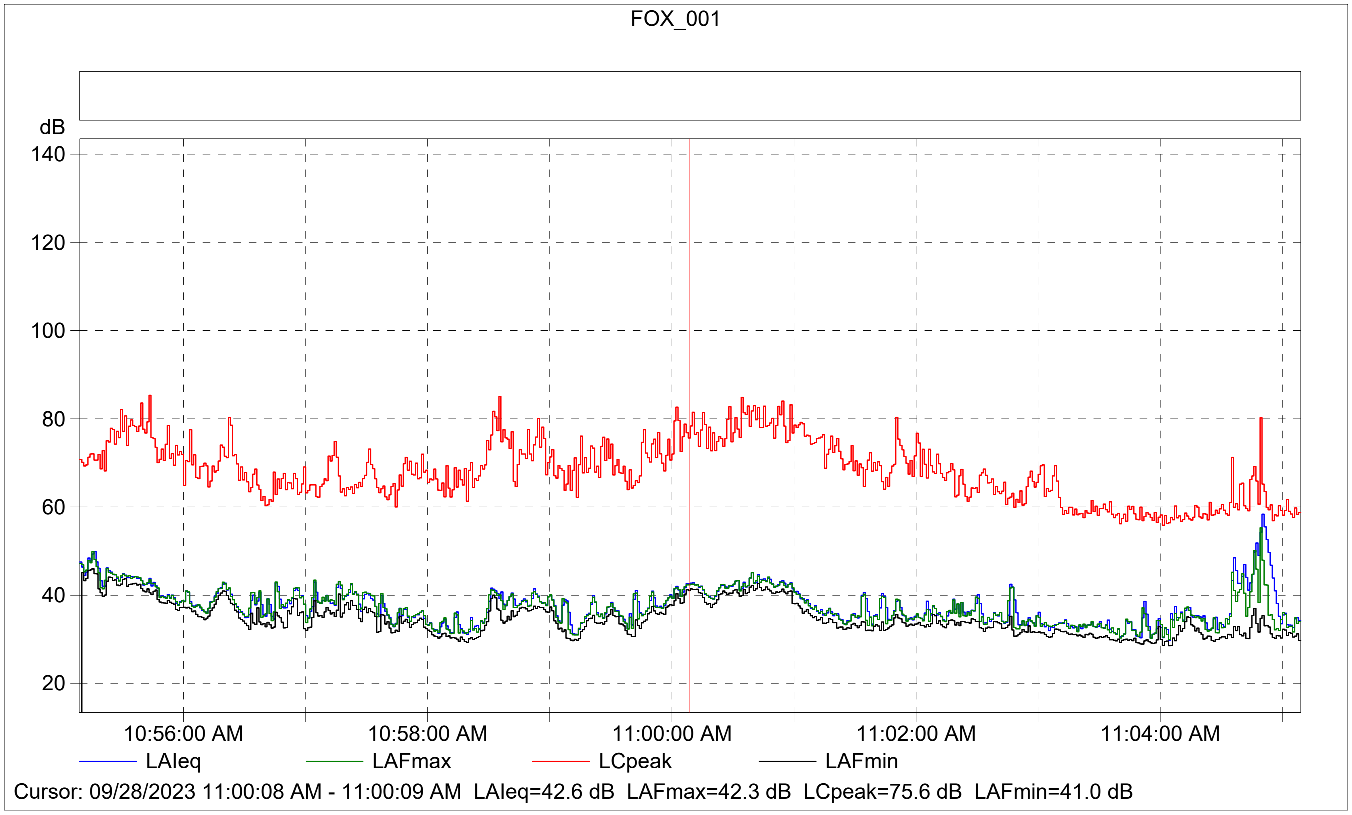
Calibration Time:		09/28/2023 10:52:20
Calibration Type:		External reference
Sensitivity:		43.4025265276432 mV/Pa

FOX_001

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	37.9	55.3	28.5
Time	10:55:09 AM	11:05:09 AM	0:10:00				
Date	09/28/2023	09/28/2023					

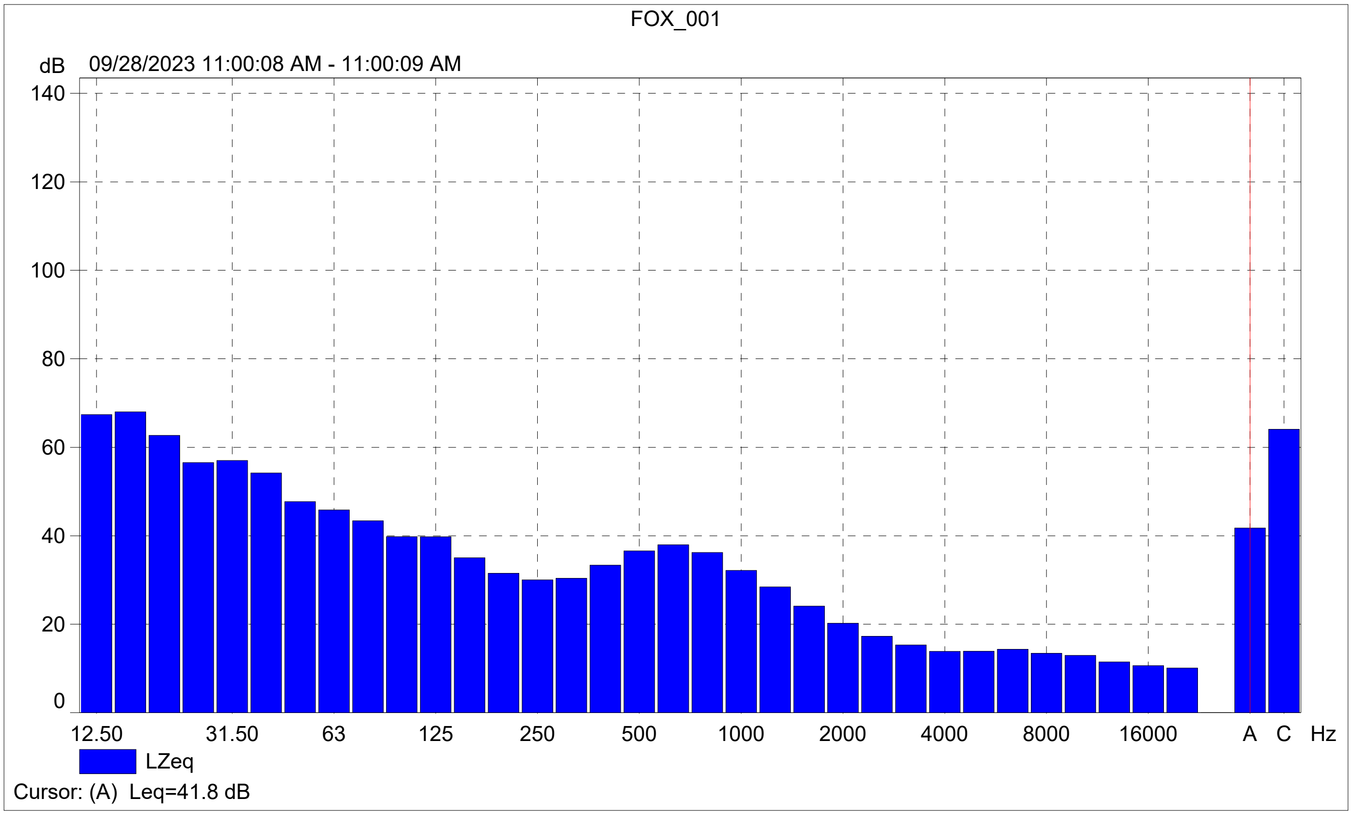

FOX_001
dB 09/28/2023 10:55:09 AM - 11:05:09 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=37.9 dB LFmax=55.3 dB LFmin=28.5 dB

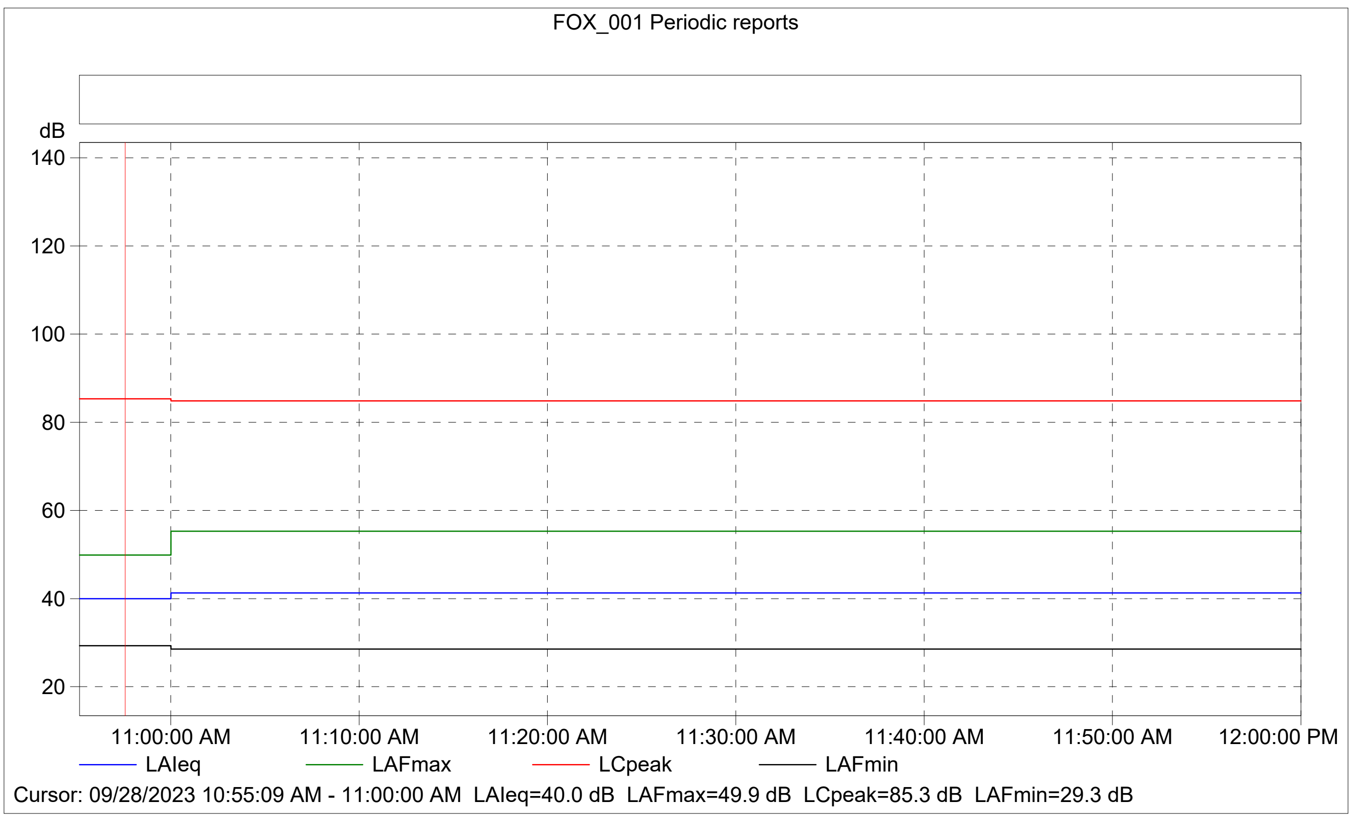

FOX_001
% Based on LAF , 10ms Class width: 0.2 dB 09/28/2023 10:55:09 AM - 11:05:09 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 45.4 dB
L5 = 42.7 dB
L10 = 41.6 dB
L50 = 35.2 dB
L90 = 31.2 dB
L95 = 30.5 dB
L99 = 29.8 dB
Level
Cumulative
Cursor: [78.2 ; 78.4[dB Level: 0.0% Cumulative: 0.0%



FOX_001

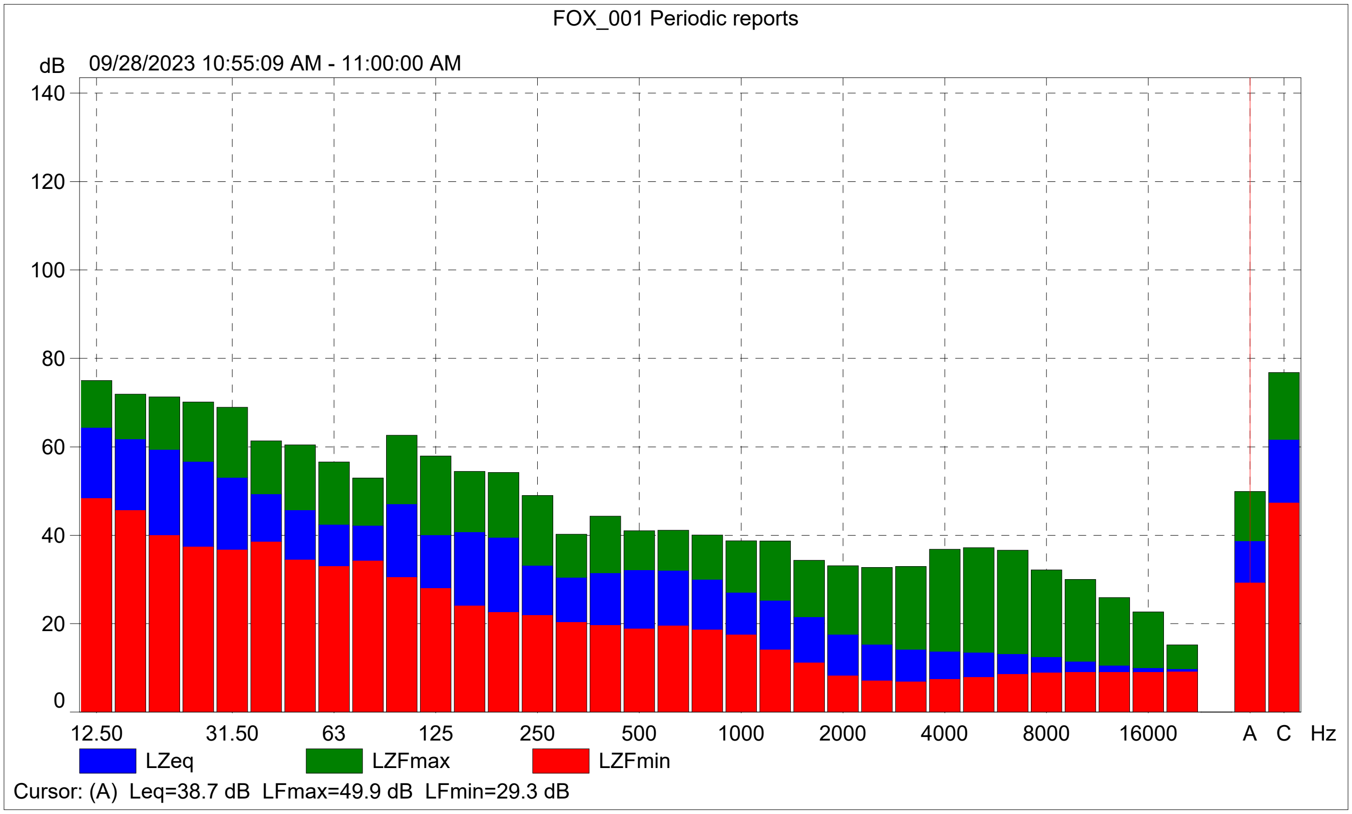
	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	42.6	42.3	41.0
Time	11:00:08 AM	0:00:01				
Date	09/28/2023					


FOX_001
dB
09/28/2023 11:00:08 AM - 11:00:09 AM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
Cursor: (A) Leq=41.8 dB

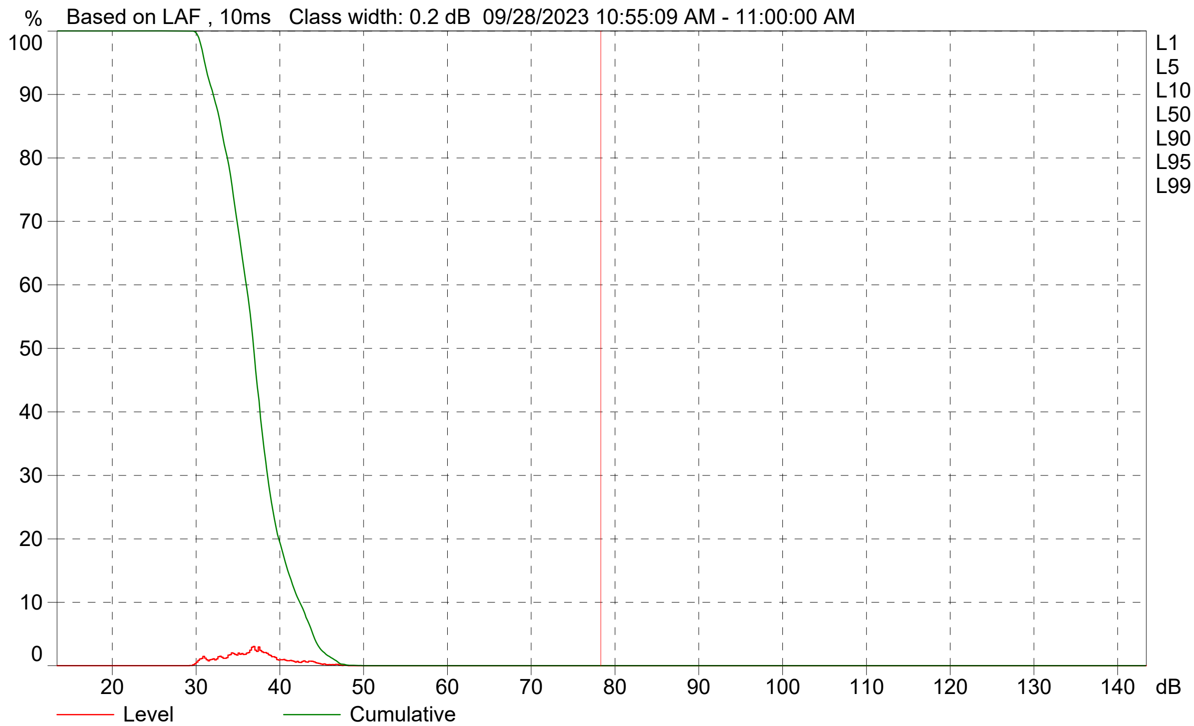

FOX_001 Periodic reports
dB
140
120
100
80
60
40
20
11:00:00 AM
11:10:00 AM
11:20:00 AM
11:30:00 AM
11:40:00 AM
11:50:00 AM
12:00:00 PM
LAIeq
LAFmax
LCpeak
LAFmin
Cursor: 09/28/2023 10:55:09 AM - 11:00:00 AM LAIeq=40.0 dB LAFmax=49.9 dB LCpeak=85.3 dB LAFmin=29.3 dB

FOX_001 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	40.0	49.9	29.3
Time	10:55:09 AM	0:04:51				
Date	09/28/2023					



FOX_001 Periodic reports



L1	=	46.3 dB
L5	=	43.8 dB
L10	=	42.2 dB
L50	=	36.8 dB
L90	=	31.9 dB
L95	=	30.9 dB
L99	=	30.2 dB

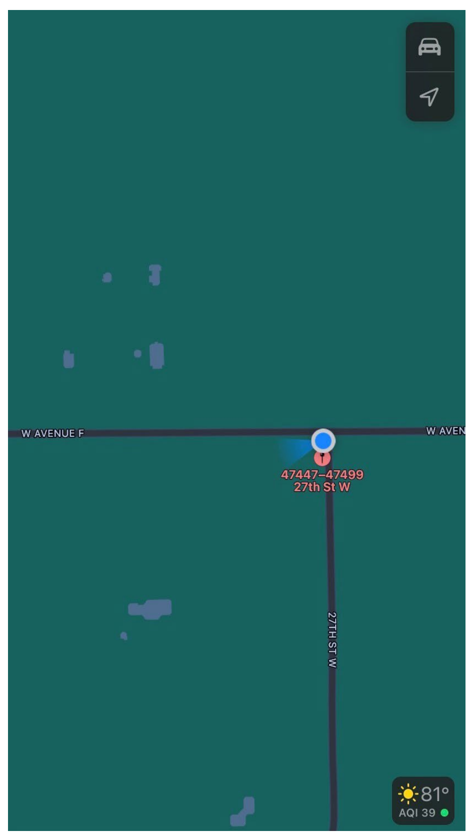
Cursor: [78.2 ; 78.4[dB Level: 0.0% Cumulative: 0.0%

Site Number: NM-2		
Recorded By: Darshan Shivaiah, Dennis Dinh		
Job Number: 195377		
Date: 9/28/2023		
Time: 11:16 AM		
Location: Southwest Corner of 27th Street and West Avenue F		
Source of Ambient Noise: Overhead Plane and Wind		
Source of Peak Noise: Truck passing by		
Noise Data		
L_{eq} (dB)	**L_{max}(dB)**	**L_{min} (dB)**
61.9	85.5	31.7

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**3011133**	**06/04/2023**	
	Microphone	**Brüel & Kjær**	**4189**	**3086765**	**06/04/2023**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**25380**	**06/04/2023**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**06/04/2023**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** Sunny
	Note: dBA Offset = 0.06		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (inches)**
	8 mph	79	29.81

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		09/28/2023 11:16:08
End Time:		09/28/2023 11:26:08
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.16

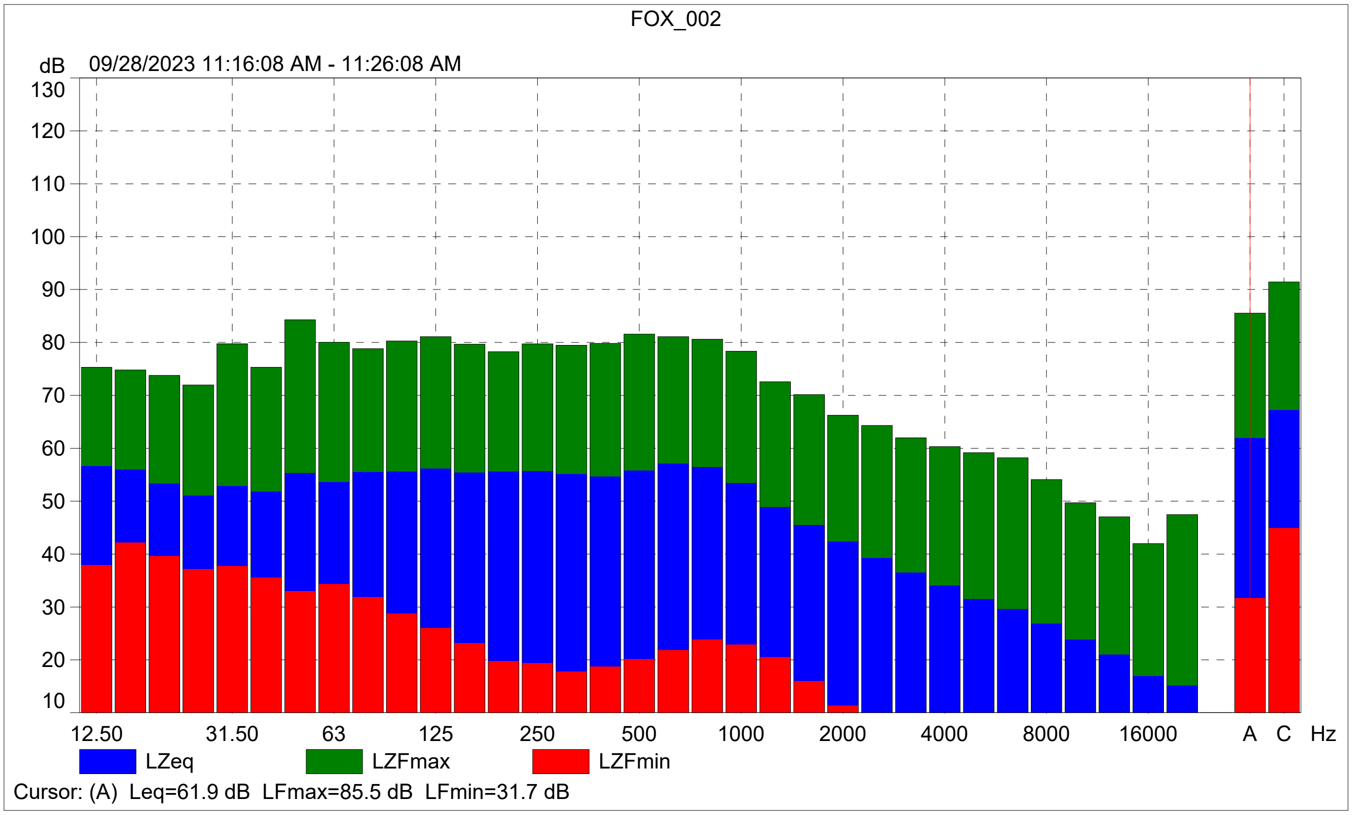
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

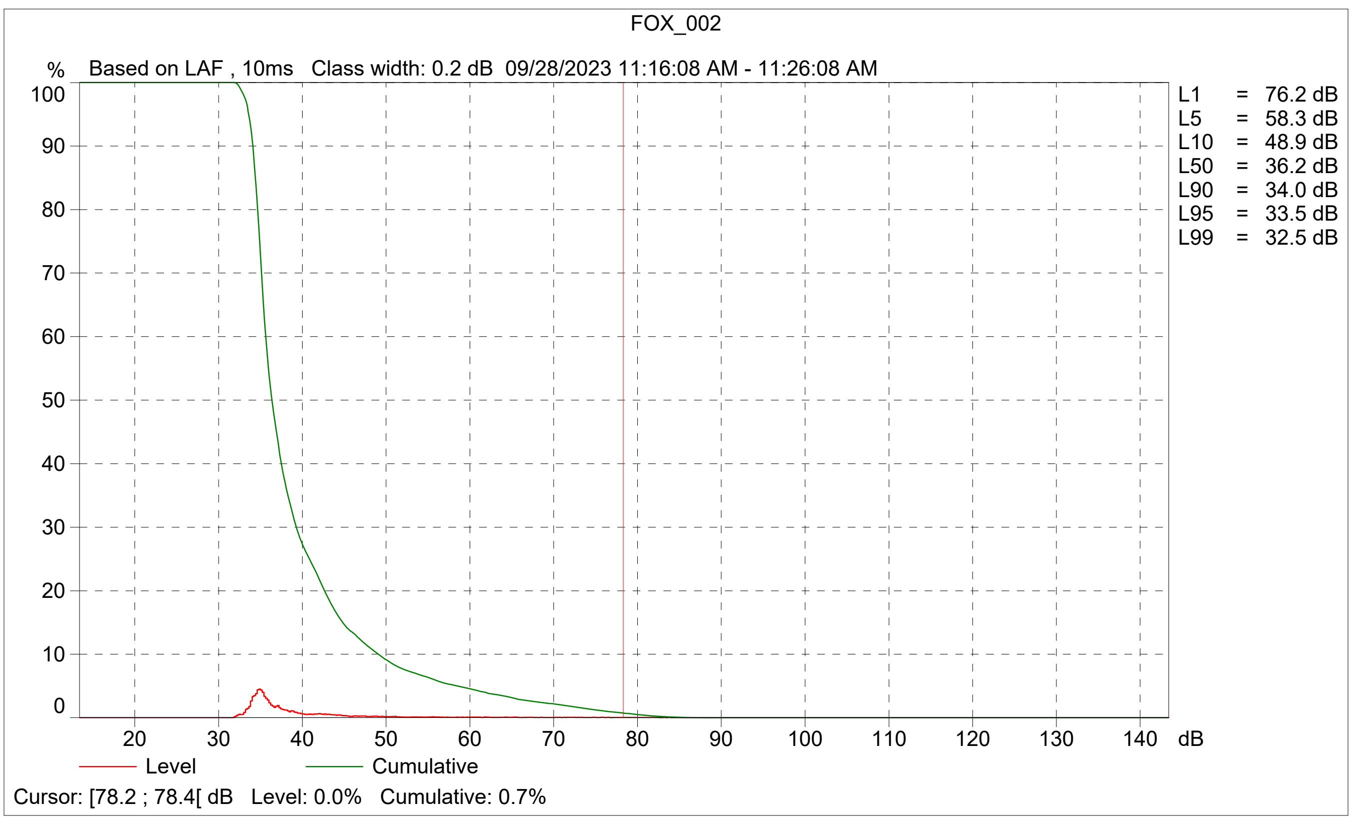
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

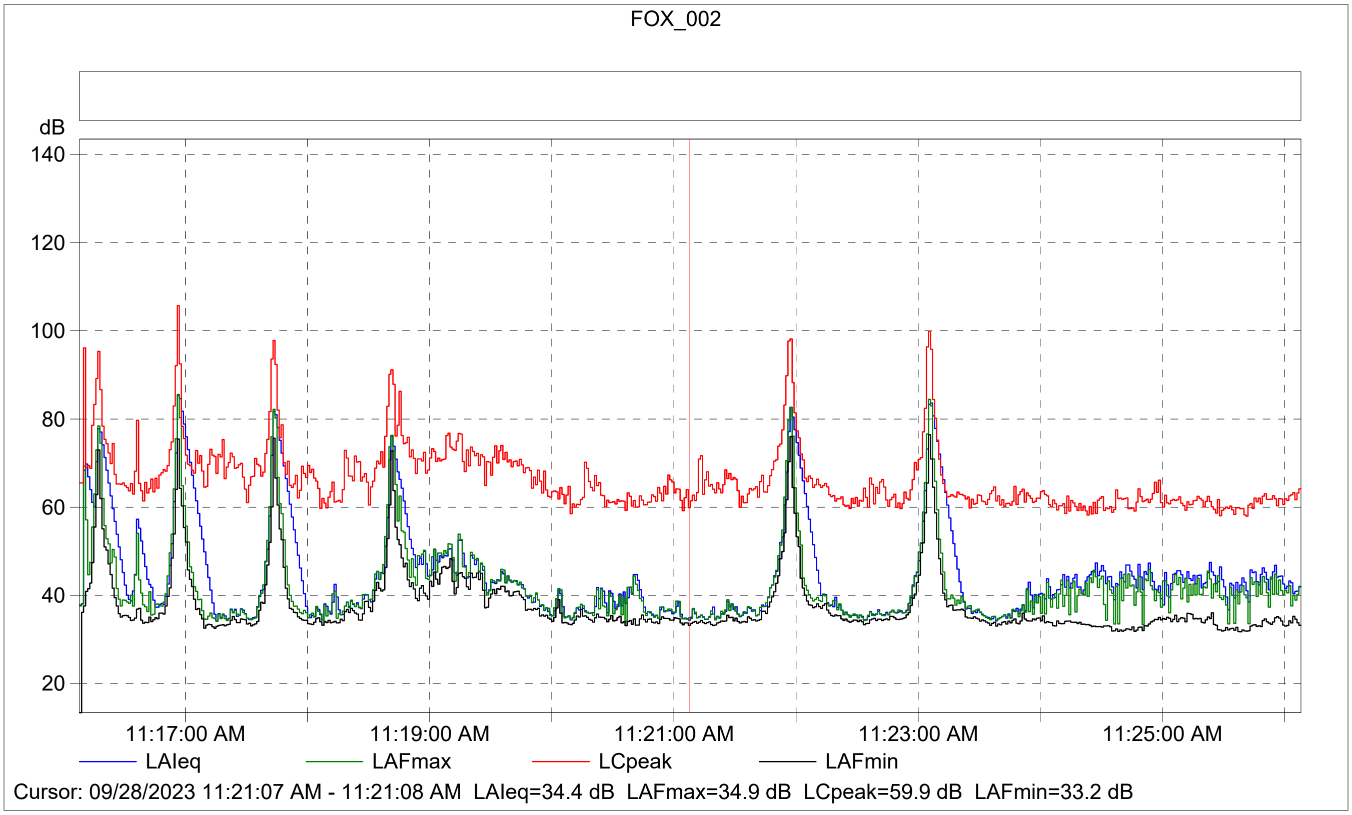
Calibration Time:		09/28/2023 10:52:20
Calibration Type:		External reference
Sensitivity:		43.4025265276432 mV/Pa

FOX_002

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	61.9	85.5	31.7
Time	11:16:08 AM	11:26:08 AM	0:10:00				
Date	09/28/2023	09/28/2023					


FOX_002
dB 09/28/2023 11:16:08 AM - 11:26:08 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=61.9 dB LFmax=85.5 dB LFmin=31.7 dB

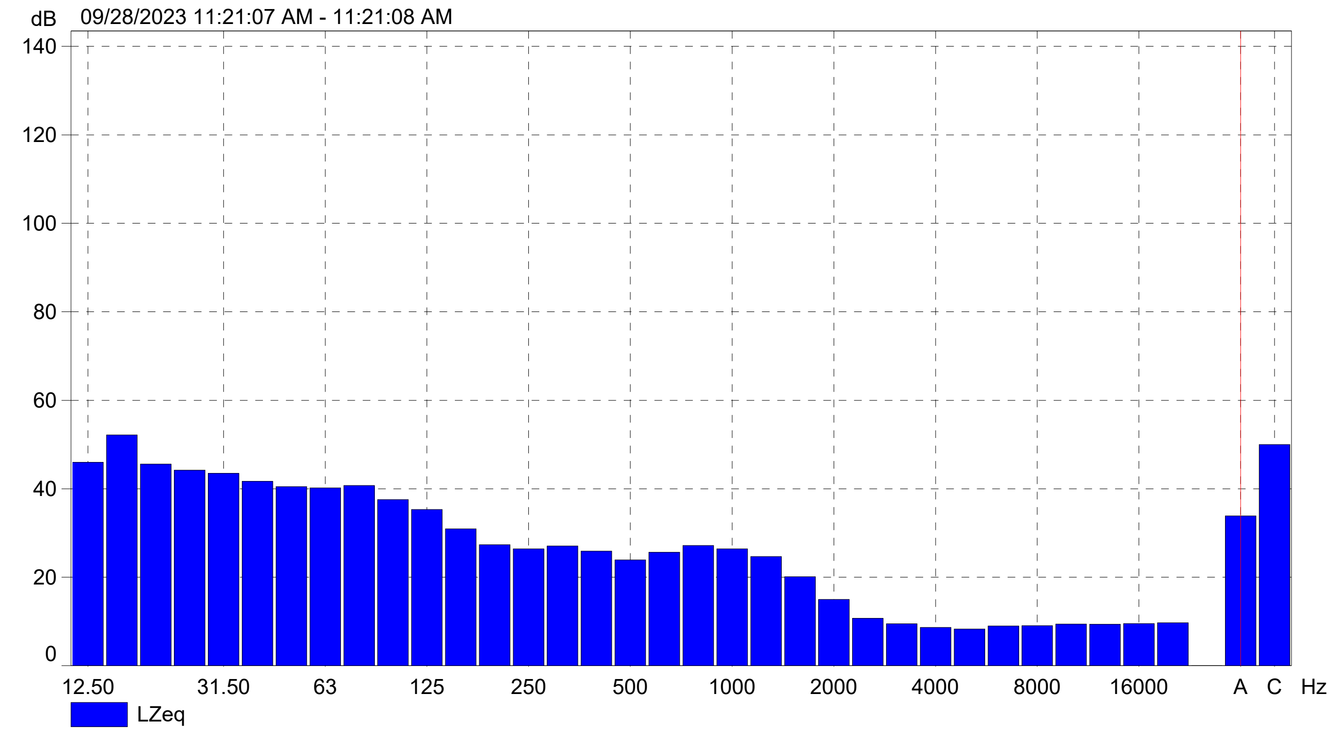

FOX_002
% Based on LAF , 10ms Class width: 0.2 dB 09/28/2023 11:16:08 AM - 11:26:08 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 76.2 dB
L5 = 58.3 dB
L10 = 48.9 dB
L50 = 36.2 dB
L90 = 34.0 dB
L95 = 33.5 dB
L99 = 32.5 dB
Level
Cumulative
Cursor: [78.2 ; 78.4[dB Level: 0.0% Cumulative: 0.7%



FOX_002

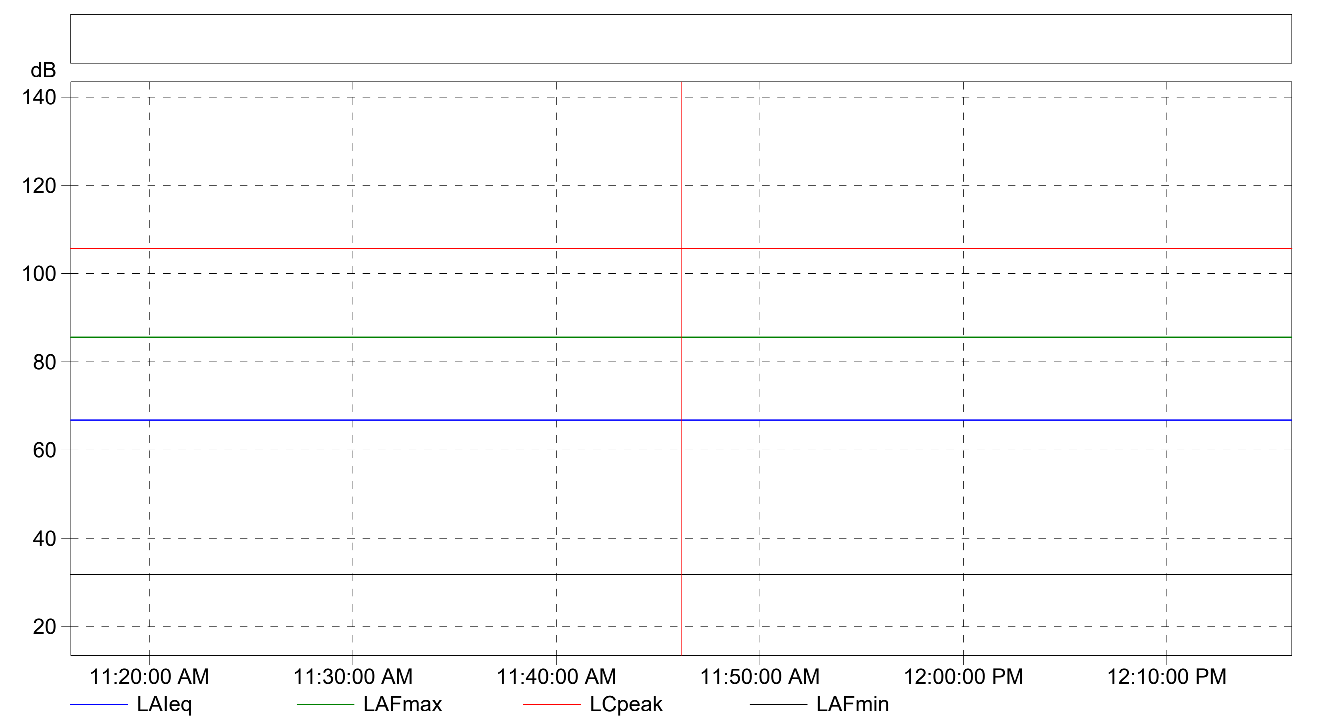
	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	34.4	34.9	33.2
Time	11:21:07 AM	0:00:01				
Date	09/28/2023					

FOX_002



Cursor: (A) Leq=33.9 dB

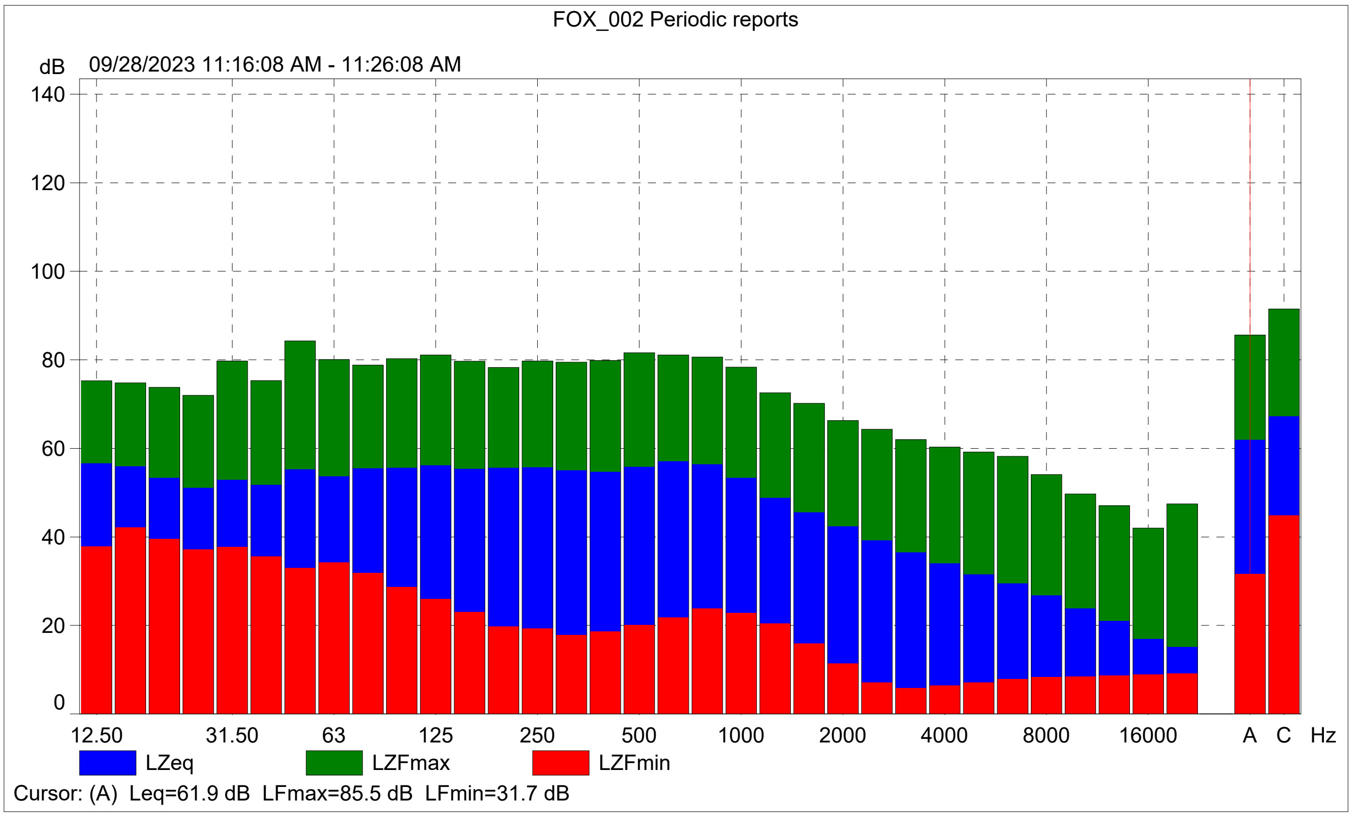
FOX_002 Periodic reports



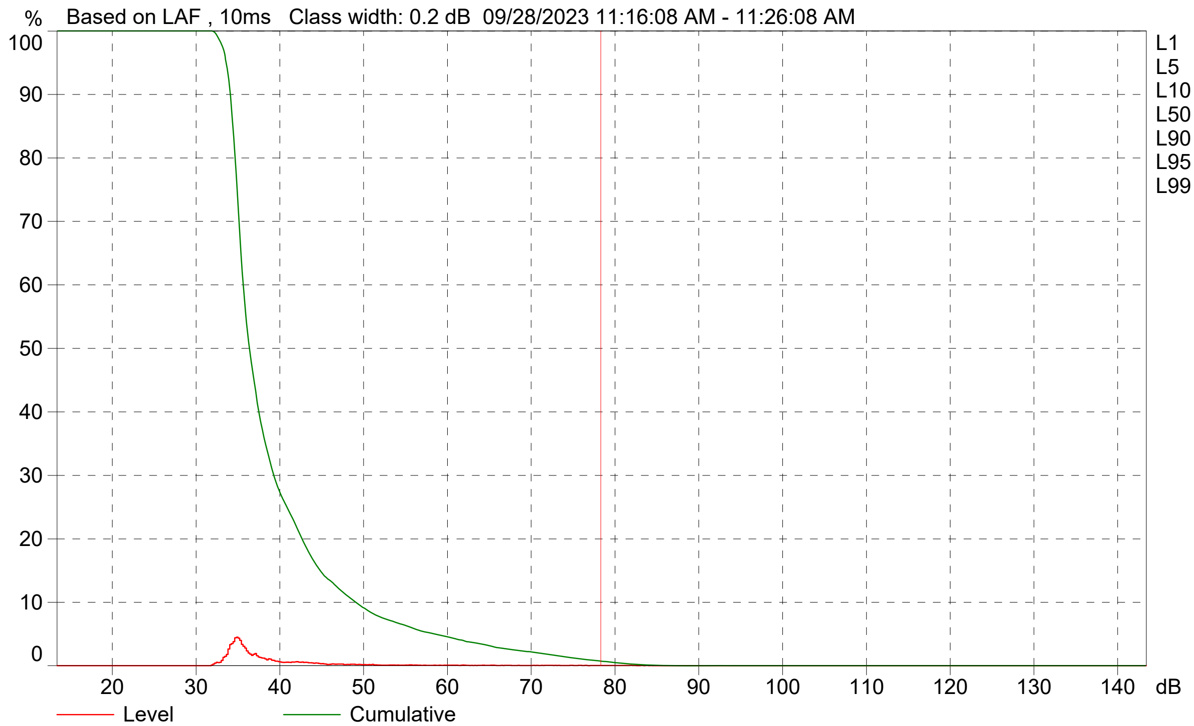
Cursor: 09/28/2023 11:16:08 AM - 12:16:08 PM LAIeq=66.8 dB LAFmax=85.5 dB LCpeak=105.7 dB LAFmin=31.7 dB

FOX_002 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	66.8	85.5	31.7
Time	11:16:08 AM	0:10:00				
Date	09/28/2023					



FOX_002 Periodic reports



L1 = 76.2 dB
L5 = 58.3 dB
L10 = 48.9 dB
L50 = 36.2 dB
L90 = 34.0 dB
L95 = 33.5 dB
L99 = 32.5 dB

Cursor: [78.2 ; 78.4[dB Level: 0.0% Cumulative: 0.7%