December 9, 2021

Ms. Tina Andersen
T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

SUBJECT: GLC FULLERTON TRUCK TRAILER STORAGE NOISE ASSESSMENT

Dear Ms. Tina Andersen:

Urban Crossroads, Inc. is pleased to provide the following Noise Assessment for the GLC Fullerton Truck Trailer Storage development (referred to as "Project") located at 1223 South State College Boulevard in the City of Fullerton. The project includes demolition of an existing approximately 24,600 square foot single-story multi-tenant commercial/industrial building to construct a truck trailer parking lot with 34 spaces on 1.25-acres, which would serve the previously approved Goodman Logistics Center (GLC) Fullerton buildings as shown on the Project site plan on Exhibit A. This Noise Assessment was prepared to support a CEQA Addendum to the approved Goodman Logistic Center Fullerton EIR (Prior EIR). The purpose of this Noise Assessment is to describe the potential Project-related operational noise, and construction noise impacts.

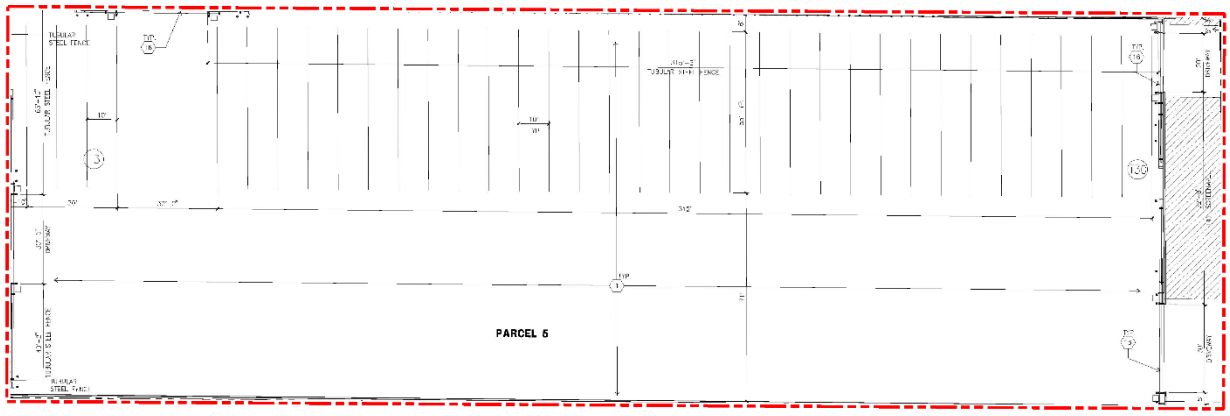
RECEIVER LOCATIONS

To assess the potential for long-term operational noise impacts, the following receiver locations, as shown on Exhibit B, were identified as representative locations for analysis. These are the same receiver locations used in the Prior EIR. The Sensitive uses or receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. To describe the potential off-site Project noise levels, eight receiver locations in the vicinity of the Project site were identified, including the location of the nearest noise sensitive residential receiver (R6) located approximately 2,017 feet southwest of the Project site. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

NOISE PREDICTION MODEL

To fully describe the exterior operational and construction noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

EXHIBIT A: SITE PLAN



Using the ISO 9613-2 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. The noise level calculations provided in this noise assessment account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces.

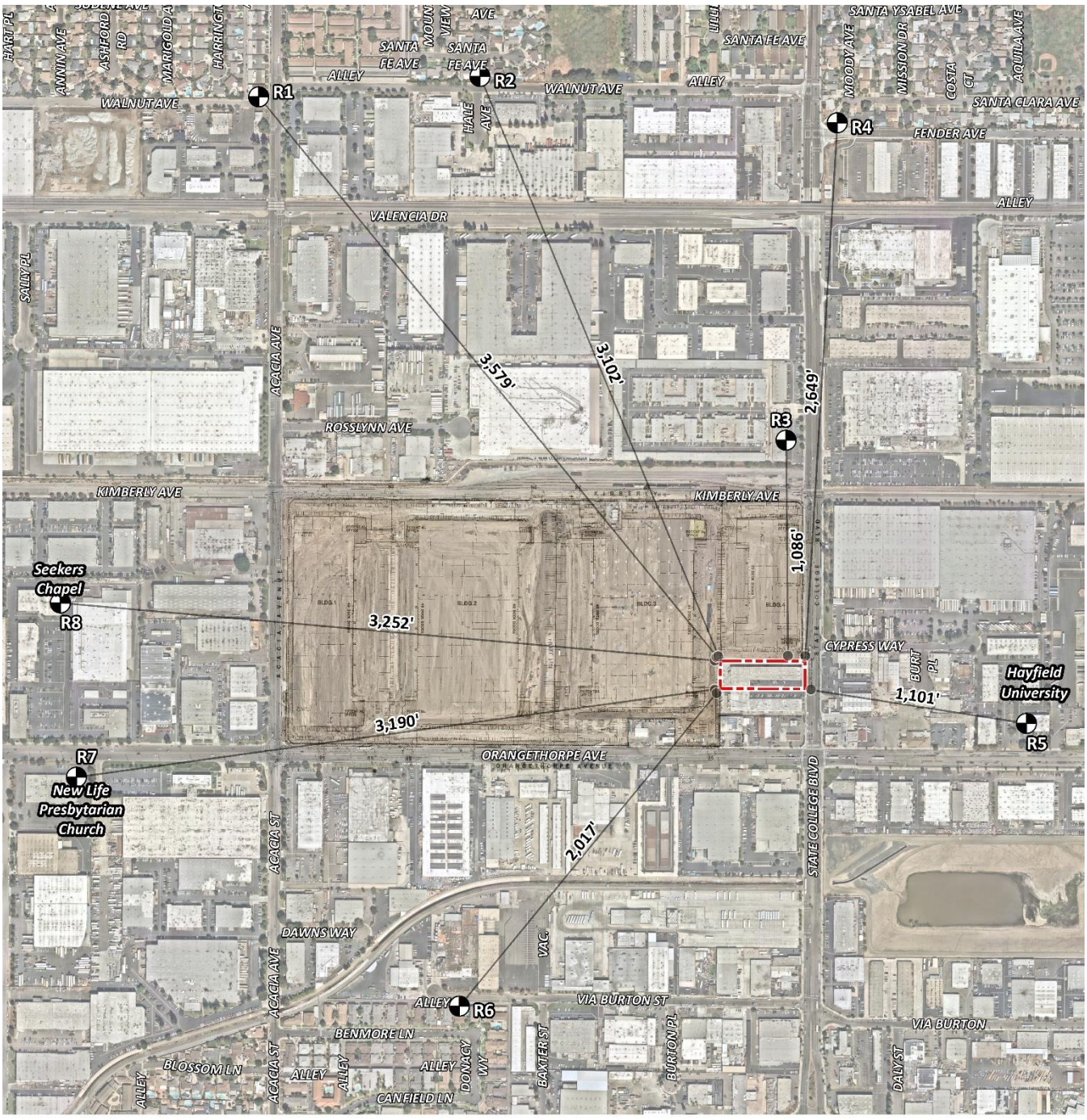
OPERATIONAL NOISE

This section analyzes the potential stationary-source operational noise impacts at the nearby receiver locations resulting from the operation of the proposed GLC Fullerton Truck Trailer Storage Project. This operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project site. The on-site Project-related noise sources are expected to include truck trailer storage.

OPERATIONAL NOISE STANDARDS

Although the Project site is located within the City of Fullerton, noise-sensitive receivers potentially impacted by operational noise activities are also located in the City of Anaheim. Therefore, to accurately describe the potential Project-related operational noise level contributions, this analysis relies on the appropriate operational noise standards outlined in the Prior EIR for the City of Fullerton and the City of Anaheim.

EXHIBIT B: RECEIVER LOCATIONS



LEGEND:

N

Site Boundary

Receiver Locations

Distance from receiver to Project site boundary (in feet)

CITY OF FULLERTON

To minimize the operational (stationary-source) noise activity from industrial land use, the City of Fullerton Municipal Code, Section 15.40.080 requires that *sound related to industrial or manufacturing processes shall comply* with the *Noise Standards and Regulations* outlined in Chapter 15.90. This chapter outlines noise standards for *sensitive receivers* that includes *all property within the residential noise zone* (Section 15.90.030(A)) and *any private or public school, hospital, residential care facility for the elderly, and religious institutions* (Section 15.90.30(B)(1)). For sensitive receivers, the City of Fullerton Municipal Code, Section 15.90.030, identifies operational noise level limits using the percentile noise descriptors. The L_{50} percentile noise descriptor identifies the noise levels occurring 50 percent of the time. These standards shall not exceed:

- The noise standard for a cumulative period of more than 30 minutes in any hour (L_{50})
- The noise standard plus 5 dB(A) for a cumulative period of more than 15 minutes but less than 30 minutes in any hour (L_{25})
- The noise standard plus 10 dB(A) for a cumulative period of more than 5 minutes but less than 15 minutes in any hour (L_8)
- The noise standard plus 15 dB(A) for a cumulative period of more than one minute but less than five minutes in any hour (L_2)
- The noise standard plus 20 dB(A) for a cumulative period of less than one minute in an hour (L_{max}).

In the event the ambient noise level exceeds any of the five noise limit categories listed above, the cumulative period applicable to the category shall be increased to reflect the ambient noise level. The City does not have specific noise level limits for commercial or industrial zones. Rather, the Municipal Code regulates the noise caused by any use on a sensitive receiver. The exterior noise level standards of the City of Fullerton Municipal Code applicable to the sensitive receivers are shown on Table 1 and included in Appendix A where Daytime is 7:00 a.m. to 10:00 p.m. and Nighttime is 10:00 p.m. to 7:00 a.m.

TABLE 1: OPERATIONAL NOISE LEVEL STANDARDS

Time Period	Exterior Noise Level Standards (dBA)[1]				
	L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)
Daytime (7:00 a.m. to 10:00 p.m.)	55	60	65	70	75
Nighttime (10:00 p.m. to 7:00 a.m.)	50	55	60	65	70

[1] The percent noise level is the level exceeded "n" percent of the time during the measurement period. L_{50} is the noise level exceeded 50% of the time. (City of Fullerton Municipal Code, Section 15.90.030 included in Appendix A).

The percentile noise descriptors are provided to ensure that the duration of the noise source is fully considered. However, due to the relatively constant intensity of the Project operational activities, the L_{50} or average L_{eq} noise level metrics best describe the truck trailer storage. In addition, the L_{eq} noise level metric accounts for noise fluctuations over time by averaging the louder and quieter events and giving more weight to the louder events. In addition, due to the mathematical relationship between the median (L_{50}) and the mean (L_{eq}), the L_{eq} will always be larger than or equal to the L_{50}. The more variable the noise becomes, the larger the L_{eq} becomes in comparison to the L_{50}. Therefore, this noise study conservatively relies on the average L_{eq} sound level limits to describe the Project operational noise levels.

CITY OF ANAHEIM

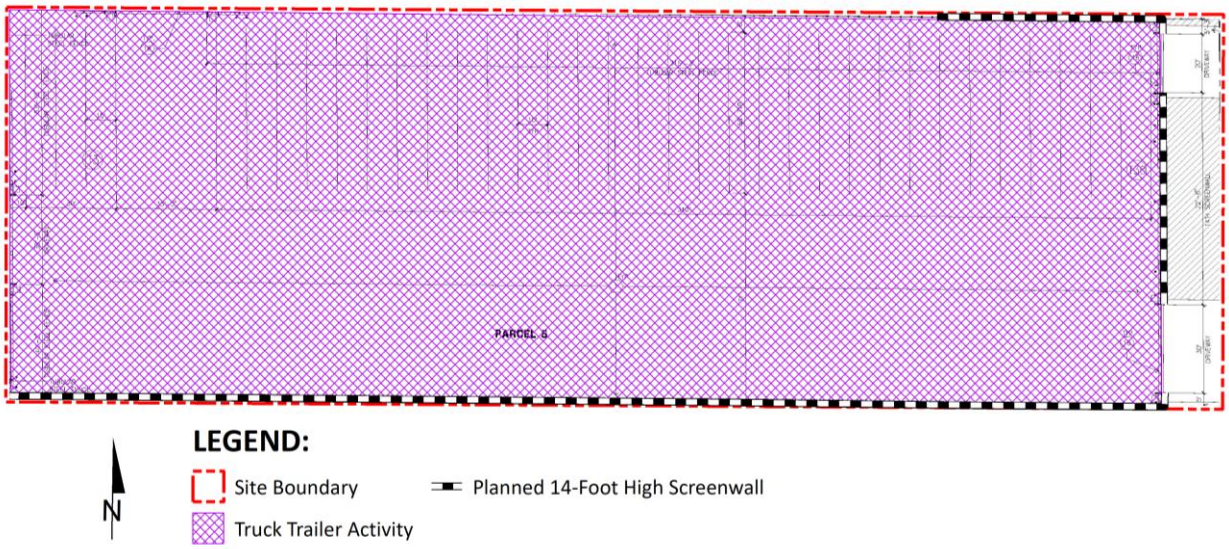
The City of Anaheim Municipal Code, Chapter 6.70 *Sound Pressure Levels,* included in Appendix B, limits sound levels for stationary sources of noise radiated for extended periods from any premises in excess of 60 decibels at the property line. (1)

OPERATIONAL NOISE SOURCES

The on-site Project-related noise sources are expected to include: truck trailer storage. To present the potential worst-case noise conditions, this analysis assumes the Project would be operational 24 hours per day, seven days per week. To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment. The reference project operational noise levels are based on the Project related noise sources shown on Exhibit C. The reference project operational sound power levels are summarized below for each scenario:

- Truck Trailer Activity (Scenario 1): 111.5 dBA L_w based on reference noise level measurements collected by Urban Crossroads, Inc. This includes truck idling, backup alarms, trailer movements and storage activities.

EXHIBIT C: OPERATIONAL NOISE SOURCE LOCATIONS



OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Fullerton and City of Anaheim exterior noise level standards at the nearest noise-sensitive receiver locations. Table 2 shows that the daytime hourly noise levels at the off-site receiver locations are expected to range from 27.4 to 44.5 dBA L_{eq} with the planned 14-high screen walls as shown on Exhibit C. The operational noise level calculations are included in Appendix C.

The operational noise analysis presented on Table 2 shows that the operational noise levels associated with GLC Fullerton Truck Trailer Storage Project will satisfy the City of Fullerton operational noise level standards adjusted to reflect the ambient noise level and the City of Anaheim 60 dBA L_{eq} anytime exterior noise level standards at all the nearest sensitive receiver locations. Therefore, the operational noise impacts are considered *less than significant* at the nearest noise-sensitive receiver locations.

In addition, the Project related operational noise levels are much lower than the exterior noise level standards adjusted to reflect the ambient noise levels per the City of Fullerton Municipal Code. Therefore, the combined Project and Prior EIR operational noise levels are not expected to contribute a measurable operational noise level increase beyond what was previously evaluated in the Prior EIR.

TABLE 2: OPERATIONAL NOISE LEVELS

Receiver Location[1]	Use	City	Project Operational Noise Levels (dBA Leq)[2]	Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
				Daytime	Nighttime	Daytime	Nighttime
R1	Residential	Fullerton	37.2	64.9	57.5	No	No
R2	Residential	Fullerton	38.6	64.9	57.5	No	No
R3	Church	Fullerton	44.5	63.0	56.2	No	No
R4	Residential	Fullerton	39.3	65.4	59.8	No	No
R5	School	Fullerton	40.6	62.5	59.0	No	No
R6	Residential	Anaheim	31.4	60.0	60.0	No	No
R7	Church	Fullerton	43.3	61.4	58.3	No	No
R8	Church	Fullerton	27.4	54.8	50.6	No	No

[1] See Exhibit B for the receiver locations.
[2] Proposed Project operational noise level calculations are included in Appendix C.
[3] Exterior noise level standards adjusted to reflect the ambient noise levels (Prior EIR) per the City of Fullerton Municipal Code, Section 15.90.030 and the City of Anaheim Municipal Code, Chapter 6.70.
[4] Do the estimated Project operational noise source activities exceed the noise level standards?
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

CONSTRUCTION

To prevent high levels of construction noise from impacting noise-sensitive land uses, City of Fullerton Municipal Code Section 15.90.050, states that construction activities are limited to the hours of 7:00 a.m. to 8:00 p.m. on any day except Sunday or a City-recognized holiday. (17) Sound created by construction or building repair of any premises within the City of Anaheim is exempt from the applications of the Municipal Code during the hours of 7:00 a.m. and 7:00 p.m. Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts with multiple pieces of equipment operating simultaneously at the nearest sensitive receiver locations were completed. This includes the additional noise attenuation provided by the existing intervening building structures and noise barriers located between the Project site and the nearest receiver locations.

To demonstrate compliance with local noise regulations, the Project-only construction noise levels are conservatively evaluated against exterior noise level thresholds based on the City of Fullerton and City of Anaheim at the nearest noise-sensitive receiver locations. Table 3 shows that the construction noise levels associated with GLC Fullerton Truck Trailer Storage Project will satisfy the City of Fullerton noise level standards adjusted to reflect the ambient noise level, and the City of Anaheim 60 dBA L_{eq} anytime exterior noise level standards at all the nearest sensitive receiver locations. Therefore, the construction noise impacts are considered *less than significant* at the nearest noise-sensitive receiver locations. The construction noise level calculations are included in Appendix D. In addition, the Project related daytime construction noise levels are less that what was previously identified in the Prior EIR. Therefore, the

combined Project and Prior EIR construction noise levels are not expected to contribute a measurable noise level increase beyond what was previously evaluated in the Prior EIR.

TABLE 3: DAYTIME CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Use	City	Construction Noise Levels (dBA L_{eq})		
			Highest Construction[2]	Daytime Threshold[3]	Threshold Exceeded?[4]
R1	Residential	Fullerton	38.0	64.9	No
R2	Residential	Fullerton	39.5	64.9	No
R3	Church	Fullerton	48.2	63.0	No
R4	Residential	Fullerton	40.8	65.4	No
R5	School	Fullerton	42.9	62.5	No
R6	Residential	Anaheim	33.3	60.0	No
R7	Church	Fullerton	44.2	61.4	No
R8	Church	Fullerton	28.0	54.8	No

[1] Noise receiver locations are shown on Exhibit B.
[2] Construction noise level calculations based on distance from the project site boundaries to nearby receiver locations.
[3] Exterior noise level standards adjusted to reflect the daytime ambient noise levels (Prior EIR) per the City of Fullerton Municipal Code, Section 15.90.030 and the City of Anaheim Municipal Code, Chapter 6.70.
[4] Do the estimated Project construction noise levels exceed the daytime construction noise level threshold?

NIGHTTIME CONCRETE POUR NOISE ANALYSIS

It is our understanding that nighttime concrete pouring activities may occur as a part of Project construction activities. Nighttime concrete pouring activities are often used to support reduced concrete mixer truck transit times and lower air temperatures than during the daytime hours. Since the nighttime concrete pours will take place outside the permitted City of Fullerton Municipal Code, Section 15.90.050 hours of 7:00 a.m. to 8:00 p.m. on any day except Sunday or a City-recognized holiday, the Project Applicant will be required to obtain authorization for nighttime work from the City of Fullerton. Any nighttime construction noise activities shall satisfy the noise limit categories outlined in Section 15.90.030 of the Municipal Code.

The estimated nighttime concrete pour activity noise levels include the additional noise attenuation provided by the existing intervening building structures and noise barriers located between the Project site and the nearest receiver locations. As shown on Table 4, the noise levels associated with the nighttime concrete pour activities (paving) are estimated to range from 29.9 to 50.2 dBA L_{eq} and will satisfy the stationary-source exterior hourly average L_{eq} noise levels adjusted to reflect the ambient noise level and the City of Anaheim 60 dBA L_{eq} anytime exterior noise level standards at all the receiver locations. Therefore, based on the results of this analysis, all nearest noise receiver locations will experience *less than significant* impacts due to the Project related nighttime concrete pour activities. The nighttime concrete pour noise level calculations are included in Appendix E.

TABLE 4: NIGHTTIME CONCRETE POUR NOISE LEVEL COMPLIANCE

Receiver Location[1]	Use	City	Construction Noise Levels (dBA L_{eq})		
			Concrete Pour Construction[2]	Nighttime Threshold[3]	Threshold Exceeded?[4]
R1	Residential	Fullerton	39.9	57.5	No
R2	Residential	Fullerton	41.5	57.5	No
R3	Church	Fullerton	50.2	56.2	No
R4	Residential	Fullerton	42.7	59.8	No
R5	School	Fullerton	44.9	59.0	No
R6	Residential	Anaheim	35.2	60.0	No
R7	Church	Fullerton	46.2	58.3	No
R8	Church	Fullerton	29.9	50.6	No

[1] Noise receiver locations are shown on Exhibit B.
[2] Concrete pour noise level calculations based on distance from the project site boundaries to nearby receiver locations.
[3] Exterior noise level standards adjusted to reflect the daytime ambient noise levels (Prior EIR) per the City of Fullerton Municipal Code, Section 15.90.030 and the City of Anaheim Municipal Code, Chapter 6.70.
[4] Do the estimated Project concrete pour noise levels exceed the nighttime construction noise level threshold?

VIBRATION

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. (3) The City of Fullerton does not identify specific vibration level limits and instead will rely on the Federal Transit Administration (FTA) methodology for the purpose of analyzing vibration impacts from the proposed project. The FTA *Transit Noise and Vibration Impact Assessment* methodology provides guidelines for the maximum-acceptable vibration criteria for different types of land uses. These guidelines allow 90 VdB for industrial (workshop) use, 84 VdB for office use and 78 VdB for daytime residential uses and 72 VdB for nighttime uses in buildings where people normally sleep. (3)

Table 5 presents the expected construction equipment vibration levels at the nearest receiver locations. At distances ranging from 1,086 feet to 3,579 feet from typical Project construction activities (at the Project site boundary), construction vibration levels are estimated to range from 22.3 to 37.9 VdB and will remain below the FTA Transit Noise and Vibration Impact Assessment Manual maximum acceptable vibration criteria of 78 VdB for daytime residential uses at all receiver locations. Therefore, the Project-related vibration impacts are considered *less than significant* during typical construction activities at the Project site. Moreover, the vibration levels reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

TABLE 5: CONSTRUCTION EQUIPMENT VIBRATION LEVEL COMPLIANCE

Receiver Location[1]	Distance to Construction Activity (Feet)	Receiver Vibration Levels (VdB)[2]					Threshold VdB[3]	Threshold Exceeded?[4]
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Levels		
R1	3,579'	0.0	14.3	21.3	22.3	22.3	78	No
R2	3,102'	0.0	16.2	23.2	24.2	24.2	78	No
R3	1,086'	8.9	29.9	36.9	37.9	37.9	78	No
R4	2,649'	0.0	18.2	25.2	26.2	26.2	78	No
R5	1,101'	8.7	29.7	36.7	37.7	37.7	78	No
R6	2,017'	0.8	21.8	28.8	29.8	29.8	78	No
R7	3,190'	0.0	15.8	22.8	23.8	23.8	78	No
R8	3,252'	0.0	15.6	22.6	23.6	23.6	78	No

[1] Noise receiver locations are shown on Exhibit B.
[2] Based on the Vibration Source Levels of Construction Equipment (Prior EIR).
[3] FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria (Prior EIR).
[4] Does the vibration level exceed the maximum acceptable vibration threshold?

CONCLUSIONS

This Noise Assessment demonstrates that the operational and construction noise levels associated with GLC Fullerton Truck Trailer Storage Project will satisfy the City of Fullerton exterior noise level standards at all nearby receiver locations with the recommended 14-foot-high noise barriers. Therefore, the operational and construction noise impacts are considered *less than significant* at the nearby noise-sensitive receiver locations. If you have any questions, please contact me directly at (949) 584-3148.

Respectfully submitted,

URBAN CROSSROADS, INC.

Bill Lawson, P.E., INCE
Principal

REFERENCES

1. **City of Anaheim.** *Municipal Code Chapter 6.70 Sound Pressure Levels.*
2. **City of Fullerton.** *Municipal Code, Chapter 15.90 Noise Standards and Regulation.*
3. **U.S. Department of Transportation, Federal Transit Administration.** *Transit Noise and Vibration Impact Assessment Manual.* September 2018.

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APPENDIX A

CITY OF FULLERTON MUNICIPAL CODE NOISE STANDARDS

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15.40.080. Industrial environmental controls.

To minimize environmental pollution by industrial or other activities the following standards are prescribed for any activity carried on in an industrial zone classification:

A. Noise control:

Sound related to industrial or manufacturing processes, excluding traffic noise, shall comply with Chapter 15.90 of this title.

B. Smoke, dust, fumes and contaminants:

Industrial or manufacturing processes out of which evolve smoke, dust, fumes, particulate matter, contaminants and specific contaminants, shall comply with the latest rules and regulations of the South Coast Air Quality Management District.

C. Odors:

Odors from gases or other odorous matter shall not be in such quantities as to be offensive beyond the property line of the parcel from which said odors emanate.

D. Hazardous materials:

1. Hazardous materials shall not be emitted into the air or ground that can cause damage to health, to animals or vegetation, or other forms of property or that can cause any excessive staining beyond the property line of the lot on which the use is located.

2. A permit shall be obtained for storage of hazardous materials from the Fullerton Fire Department.

E. Vibration:

Vibration from any machine, operation or process that can cause noticeable displacement as measured at the property line of the parcel on which the use is located shall be prohibited.

F. Glare:

All on-site lighting devices shall be designed so as to limit glare/spillover onto adjacent property with a residential zone classification.

(Ord. 3066, (part), 2005: Ord. 2982, 2001)

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(Ord. 3066, (part), 2005: Ord. 2982, 2001)

Print

Chapter 15.90
NOISE STANDARDS AND REGULATION

Sections:

15.90.010. Intent and purpose.

A. In order to control unnecessary, excessive and annoying sounds emanating from incorporated areas of the city, it shall be the policy of the city to prohibit such sounds generated from all sources as specified in this chapter except that noise regulated by any penal statute or ordinance and those activities that have been preempted by state or federal law.

B. Specified noise levels have been determined to be detrimental to the public health, welfare and safety and contrary to public interest; therefore, creating, maintaining, causing or allowing to create, maintain or cause any noise in a manner prohibited by or not in conformity with the provisions of this chapter is a public nuisance and shall be punishable as such.

(Ord. 2982, 2001)

15.90.020. Definitions.

A. Whenever used in this chapter, the following words, phrases and terms shall have the meaning as indicated below:

AMBIENT NOISE LEVEL means the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

CUMULATIVE PERIOD means an additive period of time composed of individual time segments that may be continuous or interrupted.

DECIBEL (dB) means a unit that denotes the ratio between two quantities which are proportional to power: the number of decibels corresponding to the ratio of 2 amounts of power is

10 times the logarithm to the base 10 of this ratio.

EMERGENCY MACHINERY, VEHICLE OR WORK means any machinery, vehicle or work used, employed or performed in an effort to protect, provide or restore safe conditions in the community or for the citizenry, or work by private or public utilities when restoring utility service.

FIXED NOISE SOURCE means a stationary device that creates sounds while fixed or motionless, including but not limited to industrial and commercial machinery and equipment, pumps, fans, compressors, generators, air conditioners and refrigeration equipment.

GRADING means any excavating or filling of earth material or any combination thereof conducted to prepare a site for construction or other improvements thereon.

IMPACT NOISE means the noise produced by the collision of one mass in motion with a second mass that may be either in motion or at rest.

MOBILE NOISE SOURCE shall mean any noise source that is not stationary, including but not limited to motorized vehicles, trains, and aircraft.

NOISE LEVEL means the "A" weighted sound pressure level in decibels obtained by using a sound level meter at slow response with a reference pressure of 20 micro-newtons per square meter. The unit of measurement shall be designated as dB(A).

PERSON means a person, firm, association, co-partnership, joint venture, corporation of any entity, public or private in nature.

RESIDENTIAL PROPERTY means a parcel of real property that is developed and used either in part or in whole for residential purposes, other than transient uses such as hotels and motels.

SIMPLE TONE NOISEmeans a noise characterized by a predominant frequency or frequencies so that other frequencies cannot be readily distinguished.

SOUND PRESSURE LEVEL of a sound, in decibels, means 20 times the logarithm to the base 10 of the ratio of the pressure of the sound to a reference pressure, which reference pressure shall be explicitly stated.

B. A ***NOISE ZONE*** is defined as an area where a specific set of standards has been established for allowable interior and exterior noise levels.

1. A ***RESIDENTIAL NOISE ZONE*** includes all properties with a residential zone classification, whether incorporated or unincorporated.

2. A ***COMMERCIAL NOISE ZONE*** includes all properties with a commercial or public land use zone classification, whether incorporated or unincorporated.

3. An ***INDUSTRIAL NOISE ZONE*** includes all properties with an industrial zone classification, whether incorporated or unincorporated.

(Ord. 2982, 2001)

15.90.030. Noise standards.

A. The following noise standards, unless otherwise specifically indicated, shall apply to all property within the Residential Noise Zone:

Allowable Interior Noise Level	Time Period

Not to exceed 55 dB(A)	7:00 a.m. - 10:00 p.m.
Not to exceed 45 dB(A)	10:00 p.m. - 7:00 a.m.

Allowable Exterior Noise Level	Time Period
Not to exceed 55 dB(A)	7:00 a.m. - 10:00 p.m.
Not to exceed 50 dB(A)	10:00 p.m. - 7:00 a.m.

B. Noise standards for a sensitive use:

1. A "sensitive use" for the purpose of this chapter means any private or public school, hospital, residential care facility for the elderly, and religious institution.

2. It shall be unlawful for any person at any location within the incorporated area of the city to create any noise that causes the noise level at any sensitive use, while the same is in operation to exceed the noise limits as specified for the Residential Noise Zone, notwithstanding the sensitive use may be located outside of the Residential Noise Zone.

C. It shall be unlawful for any person at any location within the incorporated area of the city to create any noise which can be classified as being continuous, reoccurring, predictable, or whose operation of noise-generating capabilities can be stopped or started at a specified time, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level, when measured on the property, either incorporated or unincorporated, to exceed:

1. The noise standard for a cumulative period of more than 30 minutes in any hour;

2. The noise standard plus 5 dB(A) for a cumulative period of more than 15 minutes but less than 30 minutes in any hour;

3. The noise standard plus 10 dB(A) for a cumulative period of more than 5 minutes but less than 15 minutes in any hour;

4. The noise standard plus 15 dB(A) for a cumulative period of more than one minute but less than five minutes in any hour;

5. The noise standard plus 20 dB(A) for a cumulative period of less than one minute in an hour.

D. In the event the ambient noise level exceeds any of the five noise limit categories listed in Subsection C, the cumulative period applicable to the category shall be increased to reflect the ambient noise level.

(Ord. 2982, 2001)

15.90.040. Activities exempt from standards.

A. The following activities shall be exempt from the noise level standards specified by this chapter:

1. School bands, school athletic and school entertainment events.

2. Outdoor gatherings, public dances, shows and sporting and entertainment events provided the events are conducted pursuant to a permit and/or license issued by the city.

3. Activities conducted on public parks, public playgrounds and public or private school grounds.

4. Any mechanical device, apparatus or equipment used, related to or connected with the use of machinery, vehicles, or work due to an emergency.

5. All mechanical devices, apparatus or equipment which are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions.

6. Mobile noise sources associated with agricultural pest control through pesticide application.

7. Noise from vehicular traffic on public streets.

B. For the drilling of water wells, the Director of Development Services may approve or conditionally approve an exception or limited exemption from the noise level standards of this chapter.

(Ord. 2982, 2001)

15.90.050. Activities with special provisions.

A. The following activities shall be exempt from the noise level standards specified by this chapter provided they take place between the hours of 7 a.m. and 8 p.m. on any day except Sunday or a City-recognized holiday.

1. Noise sources associated with construction, repair, remodeling, or grading of any real property;

2. Mobile noise sources associated with agricultural operations;

3. Noise sources associated with the maintenance of real property, including normal maintenance and repair by city and utility crews.

B. Installation of air conditioning, refrigeration and pool equipment shall be certified to be within the provisions of this chapter for night and day operation noise levels.

(Ord. 2982, 2001: Ord. 3026, 2003)

15.90.060. Noise level measurement.

A. The location selected for measuring exterior noise levels shall be at any point on the affected property. The affected property shall be the address from which the complaint was received.

B. The location selected for measuring interior noise levels shall be made within the affected property at a point at least four feet from the wall, ceiling or floor nearest the noise source.

C. Any noise level measurements made pursuant to the provisions of this chapter shall be performed using a sound level meter that meets the American National Standard Institute's Standard S1.4 - 1971 for Type 1 or Type 2 sound level meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data.

(Ord. 2982, 2001)

15.90.070. Enforcement.

A. The Director of Development Services and his duly authorized representatives are directed to enforce the provisions of this chapter.

B. No person shall interfere with, oppose or resist any authorized person charged with the enforcement of this chapter.

(Ord. 2982, 2001)

15.90.080. Appeal.

A. The owner or operator of a noise source who has been cited in violation of the provisions of this chapter may appeal the citation to the City Council. Within 15 days following receipt of a notice of appeal, the City Clerk shall forward to the City Council the recommendation of the Director of Development Services, the notice of appeal, and all evidence concerning the appeal received by the Director. In addition, any person may file with the City Council written arguments supporting or attacking the citation. The City Clerk shall mail to the applicant and the complainant a notice of the date set for hearing of the appeal. The notice shall be mailed at least ten days prior to the hearing date.

B. Within 60 days following its receipt of the notice of the appeal, the City Council shall affirm, modify or reverse the citation. The decision shall be based upon the evaluation by the City Council of the matter. As part of its decision, the City Council may direct the Director of Development Services to conduct further proceedings on the appeal. Failure of the City Council to affirm, modify or reverse the citation within the 60-day period shall constitute an affirmation of the citation.

(Ord. 2982, 2001)

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APPENDIX B

CITY OF FULLERTON MUNICIPAL CODE NOISE STANDARDS

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Print

Chapter 6.70 SOUND PRESSURE LEVELS

Sections:

6.70.010 ESTABLISHED.

Sound produced in excess of the sound pressure levels permitted herein are hereby determined to be objectionable and constitute an infringement upon the right and quiet enjoyment ofproperty in this City.

No person shall within the City create any sound radiated for extended periods from any premises which produces asound pressure level at any point on the property line in excess of sixty decibels (Re 0.0002 Microbar) read on the A-scale of a sound level meter. Readings shall be taken in accordance with the instrument manufacturer's instructions, using the slowest meter response.

The sound level measuring microphone shall be placed at any point on the property line, but not closer than three (3) feet from any wall and not less than three (3) feet above the ground, where the above listed maximum sound pressure level shall apply. At any point the measured level shall be the average of not less than three (3) readings taken at two (2) minute intervals. To have valid readings, the levels must be five (5) decibels or more above the levels prevailing at the same point when the source's ofthe alleged objectionable sound are not operating.

Sound pressure levels shall be measured with a sound level meter manufactured according to American Standard S1.4-1961 published by the American Standards Association, Inc., New York City, New York.

Traffic sounds sound created by emergencyactivities and sound created by governmental units or their contractors shall be exempt from the applications of this chapter. Sound created by construction or building repair of any premises within the City shall be exempt from the applications of this chapter during the hours of 7:00 a.m. to 7:00 p.m. Additional work hours may be permitted if deemed necessary by the Director of Public Works or Building Official. (Ord. 2526 § 1 (part); June 18, 1968; Ord. 3400 § 1; February 11, 1975: Ord. 6020 § 1; April 25, 2006.)

6.70.020 VIOLATIONS AND PENALTIES.

The first violation of this chapter by any person shall be punishable as an infraction in accordance with applicable provisions of the California Penal Code and the California Government Code. The second and all subsequent violations of said chapter committed by such person shall be punishable as a misdemeanor. (Ord. 5929 § 9; July 27, 2004.)

6.70.030 ENFORCEMENT.

The Code Enforcement Manager of the City of Anaheim shall enforce the provisions of this chapter. (Ord. 5812 § 25; June 11, 2002.)

APPENDIX C

OPERATIONAL NOISE LEVEL CALCULATIONS

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14446

CadnaA Noise Prediction Model: 14446-08.cna
Date: 30.11.21
Analyst: B. Lawson

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
RECEIVERS		R1	37.2	37.2	43.9	55.0	50.0	0.0				5.00	a	6061255.06	2263602.19	5.00
RECEIVERS		R2	38.5	38.5	45.2	55.0	50.0	0.0				5.00	a	6062341.91	2263701.76	5.00
RECEIVERS		R3	44.5	44.5	51.1	55.0	50.0	0.0				5.00	a	6063844.21	2261916.65	5.00
RECEIVERS		R4	39.3	39.3	46.0	55.0	50.0	0.0				5.00	a	6064095.09	2263474.33	5.00
RECEIVERS		R5	40.6	40.6	47.2	55.0	50.0	0.0				5.00	a	6065023.95	2260526.54	5.00
RECEIVERS		R6	31.4	31.4	38.1	55.0	50.0	0.0				5.00	a	6062239.88	2259139.17	5.00
RECEIVERS		R7	43.2	43.2	49.9	55.0	50.0	0.0				5.00	a	6060360.59	2260263.12	5.00
RECEIVERS		R8	27.4	27.4	34.0	55.0	50.0	0.0				5.00	a	6060281.17	2261118.16	5.00

Area Source(s)

ID	Result. PWL			Result. PWL"			Lw / Li		Operating Time			Moving Pt. Src			Height
	Day	Evening	Night	Day	Evening	Night	Type	Value	Day	Special	Night	Number			
	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	Day	Evening	Night	(ft)
AREASOURCE00001	111.5	111.5	111.5	74.7	74.7	74.7	Lw	111.5							8

Name	Height			Coordinates			
	Begin		End	x	y	z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
AREASOURCE	8.00	a		6063521.88	2260831.54	8.00	0.00
				6063914.36	2260827.46	8.00	0.00
				6063914.90	2260697.22	8.00	0.00
				6063522.16	2260701.03	8.00	0.00

Barrier(s)

Name	M.	ID	Absorption		Z-Ext.	Cantilever		Height			Coordinates			
			left	right		horz.	vert.	Begin		End	x	y	z	Ground
					(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
BARRIERS		BARRIERS00001						6.00	a		6062001.08	2263672.42	6.00	0.00
											6062659.93	2263671.12	6.00	0.00
BARRIERS		BARRIERS00002						6.00	a		6064020.44	2263480.19	6.00	0.00
											6064050.12	2263449.98	6.00	0.00
											6064301.16	2263452.07	6.00	0.00
BARRIEREXISTING		0						14.00	a		6063915.98	2260700.98	14.00	0.00
											6063915.89	2260696.30	14.00	0.00
											6063847.64	2260696.86	14.00	0.00
											6063769.90	2260697.76	14.00	0.00
											6063676.02	2260698.67	14.00	0.00
											6063595.42	2260699.41	14.00	0.00
											6063521.81	2260699.99	14.00	0.00
BARRIEREXISTING		0						14.00	a		6063915.65	2260731.23	14.00	0.00
											6063915.38	2260803.25	14.00	0.00
BARRIEREXISTING		0						14.00	a		6063915.24	2260823.17	14.00	0.00
											6063915.24	2260828.34	14.00	0.00
											6063838.26	2260829.16	14.00	0.00

Building(s)

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
BUILDING		BUILDING00005	x	0		30.00	a	6062064.46	2260299.41	30.00	0.00
								6062291.31	2260301.96	30.00	0.00
								6062291.31	2259776.90	30.00	0.00
								6062059.36	2259779.44	30.00	0.00
BUILDING		BUILDING00006	x	0		30.00	a	6062371.60	2260161.77	30.00	0.00
								6062510.51	2260159.22	30.00	0.00
								6062509.23	2259863.56	30.00	0.00
								6062434.04	2259863.56	30.00	0.00
								6062436.59	2259818.95	30.00	0.00
								6062372.87	2259820.23	30.00	0.00
BUILDING		BUILDING00007	x	0		30.00	a	6062533.45	2260234.41	30.00	0.00
								6062680.01	2260235.69	30.00	0.00
								6062680.01	2260160.49	30.00	0.00
								6062537.27	2260159.22	30.00	0.00
BUILDING		BUILDING00008	x	0		30.00	a	6062715.69	2260296.86	30.00	0.00
								6062785.78	2260296.86	30.00	0.00
								6062787.06	2260161.77	30.00	0.00
								6062716.96	2260163.04	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
BUILDING		BUILDING00009	x	0		30.00	a	6061697.43	2260265.00	30.00	0.00
								6061898.79	2260259.90	30.00	0.00
								6061898.79	2259942.57	30.00	0.00
								6061937.02	2259937.47	30.00	0.00
								6061935.75	2259742.49	30.00	0.00
								6061692.33	2259738.66	30.00	0.00
BUILDING		BUILDING00010	x	0		30.00	a	6062166.42	2259583.18	30.00	0.00
								6062255.62	2259589.56	30.00	0.00
								6062260.72	2259612.50	30.00	0.00
								6062441.69	2259615.04	30.00	0.00
								6062440.42	2259226.35	30.00	0.00
								6062329.54	2259227.62	30.00	0.00
								6062324.44	2259282.42	30.00	0.00
								6062126.91	2259279.87	30.00	0.00
								6062132.01	2259524.56	30.00	0.00
								6062166.42	2259527.11	30.00	0.00
BUILDING		BUILDING00011	x	0		30.00	a	6061450.45	2260243.00	30.00	0.00
								6061569.53	2260243.00	30.00	0.00
								6061566.48	2259913.23	30.00	0.00
								6061446.37	2259912.21	30.00	0.00
BUILDING		BUILDING00012	x	0		30.00	a	6060586.32	2260166.67	30.00	0.00
								6060902.86	2260166.67	30.00	0.00
								6060901.84	2260207.38	30.00	0.00
								6060832.63	2260209.42	30.00	0.00
								6060832.63	2260277.61	30.00	0.00
								6061021.94	2260275.57	30.00	0.00
								6061019.91	2260206.36	30.00	0.00
								6060949.68	2260202.29	30.00	0.00
								6060950.70	2260168.70	30.00	0.00
								6061259.10	2260164.63	30.00	0.00
								6061261.13	2259867.43	30.00	0.00
								6060591.41	2259876.59	30.00	0.00
BUILDING		BUILDING00013	x	0		30.00	a	6060483.51	2261178.97	30.00	0.00
								6060633.86	2261178.97	30.00	0.00
								6060617.67	2260744.09	30.00	0.00
								6060344.71	2260740.62	30.00	0.00
								6060343.56	2261122.30	30.00	0.00
								6060483.51	2261122.30	30.00	0.00
BUILDING		BUILDING00014	x	0		30.00	a	6060739.12	2261209.04	30.00	0.00
								6061204.07	2261203.26	30.00	0.00
								6061200.60	2261089.91	30.00	0.00
								6060740.27	2261093.38	30.00	0.00
BUILDING		BUILDING00015	x	0		30.00	a	6060948.46	2261042.49	30.00	0.00
								6061209.85	2261037.86	30.00	0.00
								6061212.17	2260884.04	30.00	0.00
								6060947.30	2260881.72	30.00	0.00
BUILDING		BUILDING00016	x	0		30.00	a	6060874.44	2260740.62	30.00	0.00
								6061021.33	2260742.93	30.00	0.00
								6061024.80	2260525.49	30.00	0.00
								6060873.28	2260523.18	30.00	0.00
BUILDING		BUILDING00017	x	0		30.00	a	6061116.17	2260805.39	30.00	0.00
								6061243.39	2260808.86	30.00	0.00
								6061245.71	2260489.63	30.00	0.00
								6061115.01	2260497.73	30.00	0.00
BUILDING		BUILDING00018	x	0		30.00	a	6060676.66	2260910.64	30.00	0.00
								6060783.07	2260911.79	30.00	0.00
								6060778.44	2260851.65	30.00	0.00
								6060820.08	2260851.65	30.00	0.00
								6060822.39	2260523.18	30.00	0.00
								6060674.35	2260528.96	30.00	0.00
BUILDING		BUILDING00019	x	0		30.00	a	6060189.21	2262251.80	30.00	0.00
								6061240.61	2262248.13	30.00	0.00
								6061251.64	2261854.77	30.00	0.00
								6060200.24	2261862.13	30.00	0.00
BUILDING		BUILDING00020	x	0		30.00	a	6060946.51	2262909.85	30.00	0.00
								6061163.41	2262909.85	30.00	0.00
								6061159.73	2262854.70	30.00	0.00
								6061233.26	2262851.03	30.00	0.00
								6061229.58	2262564.28	30.00	0.00
								6061100.91	2262567.96	30.00	0.00
								6061082.53	2262663.54	30.00	0.00
								6060935.48	2262678.24	30.00	0.00
BUILDING		BUILDING00021	x	0		30.00	a	6061119.29	2263347.32	30.00	0.00
								6061233.26	2263347.32	30.00	0.00
								6061222.23	2263273.79	30.00	0.00
								6061115.62	2263273.79	30.00	0.00
BUILDING		BUILDING00022	x	0		30.00	a	6061134.00	2263211.30	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
								6061281.05	2263200.27	30.00	0.00
								6061273.69	2263130.42	30.00	0.00
								6061134.00	2263130.42	30.00	0.00
BUILDING		BUILDING00023	x	0		30.00	a	6061420.74	2263306.88	30.00	0.00
								6061501.62	2263420.84	30.00	0.00
								6061663.37	2263420.84	30.00	0.00
								6061652.34	2263148.80	30.00	0.00
								6061431.77	2263112.04	30.00	0.00
BUILDING		BUILDING00024	x	0		30.00	a	6061439.12	2262906.17	30.00	0.00
								6061575.14	2262898.82	30.00	0.00
								6061586.17	2262604.72	30.00	0.00
								6061450.15	2262597.37	30.00	0.00
BUILDING		BUILDING00025	x	0		30.00	a	6061453.83	2263593.62	30.00	0.00
								6061656.02	2263604.65	30.00	0.00
								6061659.70	2263461.28	30.00	0.00
								6061457.50	2263461.28	30.00	0.00
BUILDING		BUILDING00026	x	0		30.00	a	6061817.77	2263597.30	30.00	0.00
								6061994.23	2263593.62	30.00	0.00
								6061983.20	2263159.83	30.00	0.00
								6061821.45	2263163.50	30.00	0.00
BUILDING		BUILDING00027	x	0		30.00	a	6061670.72	2262869.41	30.00	0.00
								6061850.86	2262869.41	30.00	0.00
								6061854.54	2262567.96	30.00	0.00
								6061792.04	2262556.93	30.00	0.00
								6061670.72	2262656.19	30.00	0.00
BUILDING		BUILDING00028	x	0		30.00	a	6061997.91	2262942.93	30.00	0.00
								6062159.66	2262935.58	30.00	0.00
								6062148.63	2262454.00	30.00	0.00
								6061983.20	2262454.00	30.00	0.00
BUILDING		BUILDING00029	x	0		30.00	a	6062034.67	2263450.25	30.00	0.00
								6062196.42	2263453.93	30.00	0.00
								6062207.45	2263358.34	30.00	0.00
								6062810.35	2263350.99	30.00	0.00
								6062788.29	2263119.39	30.00	0.00
								6062019.96	2263126.74	30.00	0.00
BUILDING		BUILDING00030	x	0		30.00	a	6062273.62	2262880.44	30.00	0.00
								6062472.14	2262887.79	30.00	0.00
								6062490.52	2262454.00	30.00	0.00
								6062604.48	2262442.97	30.00	0.00
								6062644.92	2262876.76	30.00	0.00
								6062880.20	2262876.76	30.00	0.00
								6062880.20	2262347.39	30.00	0.00
								6062266.27	2262336.36	30.00	0.00
BUILDING		BUILDING00031	x	0		30.00	a	6062292.00	2262273.86	30.00	0.00
								6062865.49	2262266.51	30.00	0.00
								6062858.14	2261880.51	30.00	0.00
								6062336.12	2261854.77	30.00	0.00
BUILDING		BUILDING00032	x	0		30.00	a	6063035.13	2261936.74	30.00	0.00
								6063036.44	2261863.82	30.00	0.00
								6063764.30	2261865.13	30.00	0.00
								6063772.11	2262018.77	30.00	0.00
								6063838.52	2262016.17	30.00	0.00
								6063845.03	2261815.65	30.00	0.00
								6062997.37	2261824.76	30.00	0.00
								6062989.56	2261939.34	30.00	0.00
BUILDING		BUILDING00033	x	0		30.00	a	6064120.77	2262249.43	30.00	0.00
								6064692.12	2262253.35	30.00	0.00
								6064696.04	2261910.93	30.00	0.00
								6064122.73	2261895.27	30.00	0.00
BUILDING		BUILDING00034	x	0		30.00	a	6064065.98	2262417.71	30.00	0.00
								6064737.13	2262415.75	30.00	0.00
								6064739.08	2262319.87	30.00	0.00
								6064058.16	2262335.53	30.00	0.00
BUILDING		BUILDING00035	x	0		30.00	a	6064095.33	2262947.97	30.00	0.00
								6064656.90	2262942.10	30.00	0.00
								6064649.08	2262715.13	30.00	0.00
								6064155.99	2262738.61	30.00	0.00
BUILDING		BUILDING00036	x	0		30.00	a	6063670.73	2262924.49	30.00	0.00
								6063842.92	2262930.36	30.00	0.00
								6063840.96	2262783.61	30.00	0.00
								6063670.73	2262779.70	30.00	0.00
BUILDING		BUILDING00037	x	0		30.00	a	6063727.47	2262748.39	30.00	0.00
								6063844.88	2262746.43	30.00	0.00
								6063840.96	2262558.59	30.00	0.00
								6063729.43	2262562.50	30.00	0.00
BUILDING		BUILDING00038	x	0		30.00	a	6063731.39	2262468.58	30.00	0.00
								6063868.36	2262474.45	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
								6063862.49	2262325.74	30.00	0.00
								6063733.35	2262321.83	30.00	0.00
BUILDING		BUILDING00039	x	0		30.00	a	6064277.31	2263378.44	30.00	0.00
								6064353.62	2263382.36	30.00	0.00
								6064353.62	2263137.77	30.00	0.00
								6064275.35	2263141.68	30.00	0.00
BUILDING		BUILDING00040	x	0		30.00	a	6063643.34	2263546.72	30.00	0.00
								6063794.00	2263542.81	30.00	0.00
								6063788.13	2263169.08	30.00	0.00
								6063846.83	2263143.64	30.00	0.00
								6063848.79	2263096.68	30.00	0.00
								6063707.91	2263096.68	30.00	0.00
								6063696.17	2263368.66	30.00	0.00
								6063647.25	2263374.53	30.00	0.00
BUILDING		BUILDING00041	x	0		30.00	a	6064118.81	2262621.20	30.00	0.00
								6064206.86	2262621.20	30.00	0.00
								6064210.78	2262482.28	30.00	0.00
								6064120.77	2262480.32	30.00	0.00
BUILDING		BUILDING00042	x	0		30.00	a	6064072.47	2260874.72	30.00	0.00
								6064255.58	2260876.22	30.00	0.00
								6064252.58	2260775.67	30.00	0.00
								6064134.01	2260778.67	30.00	0.00
								6064129.51	2260822.19	30.00	0.00
								6064076.98	2260828.20	30.00	0.00
BUILDING		BUILDING00043	x	0		30.00	a	6064120.50	2260676.61	30.00	0.00
								6064257.08	2260679.61	30.00	0.00
								6064258.58	2260591.06	30.00	0.00
								6064125.00	2260589.56	30.00	0.00
BUILDING		BUILDING00044	x	0		30.00	a	6064143.01	2260492.00	30.00	0.00
								6064240.57	2260507.01	30.00	0.00
								6064233.07	2260443.97	30.00	0.00
								6064143.01	2260436.47	30.00	0.00
BUILDING		BUILDING00045	x	0		30.00	a	6064440.19	2260481.50	30.00	0.00
								6064549.75	2260478.49	30.00	0.00
								6064552.75	2260416.96	30.00	0.00
								6064444.69	2260418.46	30.00	0.00
BUILDING		BUILDING00046	x	0		30.00	a	6064788.39	2260558.04	30.00	0.00
								6064872.44	2260552.04	30.00	0.00
								6064866.43	2260433.47	30.00	0.00
								6064785.39	2260428.96	30.00	0.00
BUILDING		BUILDING00047	x	0		30.00	a	6064573.76	2260654.10	30.00	0.00
								6064689.33	2260651.09	30.00	0.00
								6064689.33	2260577.55	30.00	0.00
								6064764.38	2260571.55	30.00	0.00
								6064771.88	2260412.46	30.00	0.00
								6064725.35	2260415.46	30.00	0.00
								6064726.85	2260543.03	30.00	0.00
								6064549.75	2260547.53	30.00	0.00
BUILDING		BUILDING00048	x	0		30.00	a	6064079.98	2261596.64	30.00	0.00
								6064590.27	2261590.64	30.00	0.00
								6064590.27	2261575.63	30.00	0.00
								6065069.05	2261572.63	30.00	0.00
								6065070.55	2261134.37	30.00	0.00
								6064600.78	2261122.37	30.00	0.00
								6064591.78	2261192.91	30.00	0.00
								6064078.48	2261194.41	30.00	0.00
BUILDING		BUILDING00050	x	0		30.00	a	6063562.18	2260685.61	30.00	0.00
								6063665.74	2260679.61	30.00	0.00
								6063667.24	2260658.60	30.00	0.00
								6063928.39	2260646.59	30.00	0.00
								6063922.39	2260591.06	30.00	0.00
								6063569.68	2260586.56	30.00	0.00

APPENDIX D

CONSTRUCTION NOISE LEVEL CALCULATIONS

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14446

CadnaA Noise Prediction Model: 14446-08 Construction.cna
Date: 30.11.21
Analyst: B. Lawson

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
RECEIVERS		R1	38.0	38.0	44.6	55.0	50.0	0.0				5.00	a	6061255.06	2263602.19	5.00
RECEIVERS		R2	39.5	39.5	46.2	55.0	50.0	0.0				5.00	a	6062341.91	2263701.76	5.00
RECEIVERS		R3	48.2	48.2	54.9	55.0	50.0	0.0				5.00	a	6063844.21	2261916.65	5.00
RECEIVERS		R4	40.7	40.7	47.4	55.0	50.0	0.0				5.00	a	6064095.09	2263474.33	5.00
RECEIVERS		R5	42.9	42.9	49.6	55.0	50.0	0.0				5.00	a	6065023.95	2260526.54	5.00
RECEIVERS		R6	33.3	33.3	39.9	55.0	50.0	0.0				5.00	a	6062239.88	2259139.17	5.00
RECEIVERS		R7	44.2	44.2	50.9	55.0	50.0	0.0				5.00	a	6060360.59	2260263.12	5.00
RECEIVERS		R8	28.0	28.0	34.6	55.0	50.0	0.0				5.00	a	6060281.17	2261118.16	5.00

Area Source(s)

ID	Result. PWL			Result. PWL"			Lw / Li		Operating Time			Moving Pt. Src			Height
	Day	Evening	Night	Day	Evening	Night	Type	Value	Day	Special	Night	Number			
	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	Day	Evening	Night	(ft)
AREASOURCE00001	112.1	112.1	112.1	75.3	75.3	75.3	Lw"	75.3							8

Name	Height				Coordinates			
	Begin		End		x	y	z	Ground
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
AREASOURCE	8.00	a			6063521.88	2260831.54	8.00	0.00
					6063914.36	2260827.46	8.00	0.00
					6063914.90	2260697.22	8.00	0.00
					6063522.16	2260701.03	8.00	0.00

Building(s)

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
BUILDING		BUILDING00005	x	0		30.00	a	6062064.46	2260299.41	30.00	0.00
								6062291.31	2260301.96	30.00	0.00
								6062291.31	2259776.90	30.00	0.00
								6062059.36	2259779.44	30.00	0.00
BUILDING		BUILDING00006	x	0		30.00	a	6062371.60	2260161.77	30.00	0.00
								6062510.51	2260159.22	30.00	0.00
								6062509.23	2259863.56	30.00	0.00
								6062434.04	2259863.56	30.00	0.00
								6062436.59	2259818.95	30.00	0.00
								6062372.87	2259820.23	30.00	0.00
BUILDING		BUILDING00007	x	0		30.00	a	6062533.45	2260234.41	30.00	0.00
								6062680.01	2260235.69	30.00	0.00
								6062680.01	2260160.49	30.00	0.00
								6062537.27	2260159.22	30.00	0.00
BUILDING		BUILDING00008	x	0		30.00	a	6062715.69	2260296.86	30.00	0.00
								6062785.78	2260296.86	30.00	0.00
								6062787.06	2260161.77	30.00	0.00
								6062716.96	2260163.04	30.00	0.00
BUILDING		BUILDING00009	x	0		30.00	a	6061697.43	2260265.00	30.00	0.00
								6061898.79	2260259.90	30.00	0.00
								6061898.79	2259942.57	30.00	0.00
								6061937.02	2259937.47	30.00	0.00
								6061935.75	2259742.49	30.00	0.00
								6061692.33	2259738.66	30.00	0.00
BUILDING		BUILDING00010	x	0		30.00	a	6062166.42	2259583.18	30.00	0.00
								6062255.62	2259589.56	30.00	0.00
								6062260.72	2259612.50	30.00	0.00
								6062441.69	2259615.04	30.00	0.00
								6062440.42	2259226.35	30.00	0.00
								6062329.54	2259227.62	30.00	0.00
								6062324.44	2259282.42	30.00	0.00
								6062126.91	2259279.87	30.00	0.00
								6062132.01	2259524.56	30.00	0.00
								6062166.42	2259527.11	30.00	0.00
BUILDING		BUILDING00011	x	0		30.00	a	6061450.45	2260243.00	30.00	0.00
								6061569.53	2260243.00	30.00	0.00
								6061566.48	2259913.23	30.00	0.00
								6061446.37	2259912.21	30.00	0.00
BUILDING		BUILDING00012	x	0		30.00	a	6060586.32	2260166.67	30.00	0.00
								6060902.86	2260166.67	30.00	0.00
								6060901.84	2260207.38	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
								6060832.63	2260209.42	30.00	0.00
								6060832.63	2260277.61	30.00	0.00
								6061021.94	2260275.57	30.00	0.00
								6061019.91	2260206.36	30.00	0.00
								6060949.68	2260202.29	30.00	0.00
								6060950.70	2260168.70	30.00	0.00
								6061259.10	2260164.63	30.00	0.00
								6061261.13	2259867.43	30.00	0.00
								6060591.41	2259876.59	30.00	0.00
BUILDING		BUILDING00013	x	0		30.00	a	6060483.51	2261178.97	30.00	0.00
								6060633.86	2261178.97	30.00	0.00
								6060617.67	2260744.09	30.00	0.00
								6060344.71	2260740.62	30.00	0.00
								6060343.56	2261122.30	30.00	0.00
								6060483.51	2261122.30	30.00	0.00
BUILDING		BUILDING00014	x	0		30.00	a	6060739.12	2261209.04	30.00	0.00
								6061204.07	2261203.26	30.00	0.00
								6061200.60	2261089.91	30.00	0.00
								6060740.27	2261093.38	30.00	0.00
BUILDING		BUILDING00015	x	0		30.00	a	6060948.46	2261042.49	30.00	0.00
								6061209.85	2261037.86	30.00	0.00
								6061212.17	2260884.04	30.00	0.00
								6060947.30	2260881.72	30.00	0.00
BUILDING		BUILDING00016	x	0		30.00	a	6060874.44	2260740.62	30.00	0.00
								6061021.33	2260742.93	30.00	0.00
								6061024.80	2260525.49	30.00	0.00
								6060873.28	2260523.18	30.00	0.00
BUILDING		BUILDING00017	x	0		30.00	a	6061116.17	2260805.39	30.00	0.00
								6061243.39	2260808.86	30.00	0.00
								6061245.71	2260489.63	30.00	0.00
								6061115.01	2260497.73	30.00	0.00
BUILDING		BUILDING00018	x	0		30.00	a	6060676.66	2260910.64	30.00	0.00
								6060783.07	2260911.79	30.00	0.00
								6060778.44	2260851.65	30.00	0.00
								6060820.08	2260851.65	30.00	0.00
								6060822.39	2260523.18	30.00	0.00
								6060674.35	2260528.96	30.00	0.00
BUILDING		BUILDING00019	x	0		30.00	a	6060189.21	2262251.80	30.00	0.00
								6061240.61	2262248.13	30.00	0.00
								6061251.64	2261854.77	30.00	0.00
								6060200.24	2261862.13	30.00	0.00
BUILDING		BUILDING00020	x	0		30.00	a	6060946.51	2262909.85	30.00	0.00
								6061163.41	2262909.85	30.00	0.00
								6061159.73	2262854.70	30.00	0.00
								6061233.26	2262851.03	30.00	0.00
								6061229.58	2262564.28	30.00	0.00
								6061100.91	2262567.96	30.00	0.00
								6061082.53	2262663.54	30.00	0.00
								6060935.48	2262678.24	30.00	0.00
BUILDING		BUILDING00021	x	0		30.00	a	6061119.29	2263347.32	30.00	0.00
								6061233.26	2263347.32	30.00	0.00
								6061222.23	2263273.79	30.00	0.00
								6061115.62	2263273.79	30.00	0.00
BUILDING		BUILDING00022	x	0		30.00	a	6061134.00	2263211.30	30.00	0.00
								6061281.05	2263200.27	30.00	0.00
								6061273.69	2263130.42	30.00	0.00
								6061134.00	2263130.42	30.00	0.00
BUILDING		BUILDING00023	x	0		30.00	a	6061420.74	2263306.88	30.00	0.00
								6061501.62	2263420.84	30.00	0.00
								6061663.37	2263420.84	30.00	0.00
								6061652.34	2263148.80	30.00	0.00
								6061431.77	2263112.04	30.00	0.00
BUILDING		BUILDING00024	x	0		30.00	a	6061439.12	2262906.17	30.00	0.00
								6061575.14	2262898.82	30.00	0.00
								6061586.17	2262604.72	30.00	0.00
								6061450.15	2262597.37	30.00	0.00
BUILDING		BUILDING00025	x	0		30.00	a	6061453.83	2263593.62	30.00	0.00
								6061656.02	2263604.65	30.00	0.00
								6061659.70	2263461.28	30.00	0.00
								6061457.50	2263461.28	30.00	0.00
BUILDING		BUILDING00026	x	0		30.00	a	6061817.77	2263597.30	30.00	0.00
								6061994.23	2263593.62	30.00	0.00
								6061983.20	2263159.83	30.00	0.00
								6061821.45	2263163.50	30.00	0.00
BUILDING		BUILDING00027	x	0		30.00	a	6061670.72	2262869.41	30.00	0.00
								6061850.86	2262869.41	30.00	0.00
								6061854.54	2262567.96	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
								6061792.04	2262556.93	30.00	0.00
								6061670.72	2262656.19	30.00	0.00
BUILDING		BUILDING00028	x	0		30.00	a	6061997.91	2262942.93	30.00	0.00
								6062159.66	2262935.58	30.00	0.00
								6062148.63	2262454.00	30.00	0.00
								6061983.20	2262454.00	30.00	0.00
BUILDING		BUILDING00029	x	0		30.00	a	6062034.67	2263450.25	30.00	0.00
								6062196.42	2263453.93	30.00	0.00
								6062207.45	2263358.34	30.00	0.00
								6062810.35	2263350.99	30.00	0.00
								6062788.29	2263119.39	30.00	0.00
								6062019.96	2263126.74	30.00	0.00
BUILDING		BUILDING00030	x	0		30.00	a	6062273.62	2262880.44	30.00	0.00
								6062472.14	2262887.79	30.00	0.00
								6062490.52	2262454.00	30.00	0.00
								6062604.48	2262442.97	30.00	0.00
								6062644.92	2262876.76	30.00	0.00
								6062880.20	2262876.76	30.00	0.00
								6062880.20	2262347.39	30.00	0.00
								6062266.27	2262336.36	30.00	0.00
BUILDING		BUILDING00031	x	0		30.00	a	6062292.00	2262273.86	30.00	0.00
								6062865.49	2262266.51	30.00	0.00
								6062858.14	2261880.51	30.00	0.00
								6062336.12	2261854.77	30.00	0.00
BUILDING		BUILDING00032	x	0		30.00	a	6063035.13	2261936.74	30.00	0.00
								6063036.44	2261863.82	30.00	0.00
								6063764.30	2261865.13	30.00	0.00
								6063772.11	2262018.77	30.00	0.00
								6063838.52	2262016.17	30.00	0.00
								6063845.03	2261815.65	30.00	0.00
								6062997.37	2261824.76	30.00	0.00
								6062989.56	2261939.34	30.00	0.00
BUILDING		BUILDING00033	x	0		30.00	a	6064120.77	2262249.43	30.00	0.00
								6064692.12	2262253.35	30.00	0.00
								6064696.04	2261910.93	30.00	0.00
								6064122.73	2261895.27	30.00	0.00
BUILDING		BUILDING00034	x	0		30.00	a	6064065.98	2262417.71	30.00	0.00
								6064737.13	2262415.75	30.00	0.00
								6064739.08	2262319.87	30.00	0.00
								6064058.16	2262335.53	30.00	0.00
BUILDING		BUILDING00035	x	0		30.00	a	6064095.33	2262947.97	30.00	0.00
								6064656.90	2262942.10	30.00	0.00
								6064649.08	2262715.13	30.00	0.00
								6064155.99	2262738.61	30.00	0.00
BUILDING		BUILDING00036	x	0		30.00	a	6063670.73	2262924.49	30.00	0.00
								6063842.92	2262930.36	30.00	0.00
								6063840.96	2262783.61	30.00	0.00
								6063670.73	2262779.70	30.00	0.00
BUILDING		BUILDING00037	x	0		30.00	a	6063727.47	2262748.39	30.00	0.00
								6063844.88	2262746.43	30.00	0.00
								6063840.96	2262558.59	30.00	0.00
								6063729.43	2262562.50	30.00	0.00
BUILDING		BUILDING00038	x	0		30.00	a	6063731.39	2262468.58	30.00	0.00
								6063868.36	2262474.45	30.00	0.00
								6063862.49	2262325.74	30.00	0.00
								6063733.35	2262321.83	30.00	0.00
BUILDING		BUILDING00039	x	0		30.00	a	6064277.31	2263378.44	30.00	0.00
								6064353.62	2263382.36	30.00	0.00
								6064353.62	2263137.77	30.00	0.00
								6064275.35	2263141.68	30.00	0.00
BUILDING		BUILDING00040	x	0		30.00	a	6063643.34	2263546.72	30.00	0.00
								6063794.00	2263542.81	30.00	0.00
								6063788.13	2263169.08	30.00	0.00
								6063846.83	2263143.64	30.00	0.00
								6063848.79	2263096.68	30.00	0.00
								6063707.91	2263096.68	30.00	0.00
								6063696.17	2263368.66	30.00	0.00
								6063647.25	2263374.53	30.00	0.00
BUILDING		BUILDING00041	x	0		30.00	a	6064118.81	2262621.20	30.00	0.00
								6064206.86	2262621.20	30.00	0.00
								6064210.78	2262482.28	30.00	0.00
								6064120.77	2262480.32	30.00	0.00
BUILDING		BUILDING00042	x	0		30.00	a	6064072.47	2260874.72	30.00	0.00
								6064255.58	2260876.22	30.00	0.00
								6064252.58	2260775.67	30.00	0.00
								6064134.01	2260778.67	30.00	0.00
								6064129.51	2260822.19	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
								6064076.98	2260828.20	30.00	0.00
BUILDING		BUILDING00043	x	0		30.00	a	6064120.50	2260676.61	30.00	0.00
								6064257.08	2260679.61	30.00	0.00
								6064258.58	2260591.06	30.00	0.00
								6064125.00	2260589.56	30.00	0.00
BUILDING		BUILDING00044	x	0		30.00	a	6064143.01	2260492.00	30.00	0.00
								6064240.57	2260507.01	30.00	0.00
								6064233.07	2260443.97	30.00	0.00
								6064143.01	2260436.47	30.00	0.00
BUILDING		BUILDING00045	x	0		30.00	a	6064440.19	2260481.50	30.00	0.00
								6064549.75	2260478.49	30.00	0.00
								6064552.75	2260416.96	30.00	0.00
								6064444.69	2260418.46	30.00	0.00
BUILDING		BUILDING00046	x	0		30.00	a	6064788.39	2260558.04	30.00	0.00
								6064872.44	2260552.04	30.00	0.00
								6064866.43	2260433.47	30.00	0.00
								6064785.39	2260428.96	30.00	0.00
BUILDING		BUILDING00047	x	0		30.00	a	6064573.76	2260654.10	30.00	0.00
								6064689.33	2260651.09	30.00	0.00
								6064689.33	2260577.55	30.00	0.00
								6064764.38	2260571.55	30.00	0.00
								6064771.88	2260412.46	30.00	0.00
								6064725.35	2260415.46	30.00	0.00
								6064726.85	2260543.03	30.00	0.00
								6064549.75	2260547.53	30.00	0.00
BUILDING		BUILDING00048	x	0		30.00	a	6064079.98	2261596.64	30.00	0.00
								6064590.27	2261590.64	30.00	0.00
								6064590.27	2261575.63	30.00	0.00
								6065069.05	2261572.63	30.00	0.00
								6065070.55	2261134.37	30.00	0.00
								6064600.78	2261122.37	30.00	0.00
								6064591.78	2261192.91	30.00	0.00
								6064078.48	2261194.41	30.00	0.00
BUILDING		BUILDING00050	x	0		30.00	a	6063562.18	2260685.61	30.00	0.00
								6063665.74	2260679.61	30.00	0.00
								6063667.24	2260658.60	30.00	0.00
								6063928.39	2260646.59	30.00	0.00
								6063922.39	2260591.06	30.00	0.00
								6063569.68	2260586.56	30.00	0.00

APPENDIX E

CONCRETE POUR NOISE LEVEL CALCULATIONS

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14446

CadnaA Noise Prediction Model: 14446-08 ConcretePour.cna
Date: 30.11.21
Analyst: B. Lawson

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
RECEIVERS		R1	39.9	39.9	46.6	55.0	50.0	0.0				5.00	a	6061255.06	2263602.19	5.00
RECEIVERS		R2	41.4	41.4	48.1	55.0	50.0	0.0				5.00	a	6062341.91	2263701.76	5.00
RECEIVERS		R3	50.1	50.1	56.8	55.0	50.0	0.0				5.00	a	6063844.21	2261916.65	5.00
RECEIVERS		R4	42.6	42.6	49.3	55.0	50.0	0.0				5.00	a	6064095.09	2263474.33	5.00
RECEIVERS		R5	44.8	44.8	51.5	55.0	50.0	0.0				5.00	a	6065023.95	2260526.54	5.00
RECEIVERS		R6	35.2	35.2	41.9	55.0	50.0	0.0				5.00	a	6062239.88	2259139.17	5.00
RECEIVERS		R7	46.1	46.1	52.8	55.0	50.0	0.0				5.00	a	6060360.59	2260263.12	5.00
RECEIVERS		R8	29.9	29.9	36.6	55.0	50.0	0.0				5.00	a	6060281.17	2261118.16	5.00

Area Source(s)

ID	Result. PWL			Result. PWL"			Lw / Li		Operating Time			Moving Pt. Src			Height
	Day	Evening	Night	Day	Evening	Night	Type	Value	Day	Special	Night	Number			
	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	Day	Evening	Night	(ft)
AREASOURCE00001	114.0	114.0	114.0	77.2	77.2	77.2	Lw	114							8

Name	Height			Coordinates			
	Begin		End	x	y	z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
AREASOURCE	8.00	a		6063521.88	2260831.54	8.00	0.00
				6063914.36	2260827.46	8.00	0.00
				6063914.90	2260697.22	8.00	0.00
				6063522.16	2260701.03	8.00	0.00

Building(s)

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
BUILDING		BUILDING00005	x	0		30.00	a	6062064.46	2260299.41	30.00	0.00
								6062291.31	2260301.96	30.00	0.00
								6062291.31	2259776.90	30.00	0.00
								6062059.36	2259779.44	30.00	0.00
BUILDING		BUILDING00006	x	0		30.00	a	6062371.60	2260161.77	30.00	0.00
								6062510.51	2260159.22	30.00	0.00
								6062509.23	2259863.56	30.00	0.00
								6062434.04	2259863.56	30.00	0.00
								6062436.59	2259818.95	30.00	0.00
								6062372.87	2259820.23	30.00	0.00
BUILDING		BUILDING00007	x	0		30.00	a	6062533.45	2260234.41	30.00	0.00
								6062680.01	2260235.69	30.00	0.00
								6062680.01	2260160.49	30.00	0.00
								6062537.27	2260159.22	30.00	0.00
BUILDING		BUILDING00008	x	0		30.00	a	6062715.69	2260296.86	30.00	0.00
								6062785.78	2260296.86	30.00	0.00
								6062787.06	2260161.77	30.00	0.00
								6062716.96	2260163.04	30.00	0.00
BUILDING		BUILDING00009	x	0		30.00	a	6061697.43	2260265.00	30.00	0.00
								6061898.79	2260259.90	30.00	0.00
								6061898.79	2259942.57	30.00	0.00
								6061937.02	2259937.47	30.00	0.00
								6061935.75	2259742.49	30.00	0.00
								6061692.33	2259738.66	30.00	0.00
BUILDING		BUILDING00010	x	0		30.00	a	6062166.42	2259583.18	30.00	0.00
								6062255.62	2259589.56	30.00	0.00
								6062260.72	2259612.50	30.00	0.00
								6062441.69	2259615.04	30.00	0.00
								6062440.42	2259226.35	30.00	0.00
								6062329.54	2259227.62	30.00	0.00
								6062324.44	2259282.42	30.00	0.00
								6062126.91	2259279.87	30.00	0.00
								6062132.01	2259524.56	30.00	0.00
								6062166.42	2259527.11	30.00	0.00
BUILDING		BUILDING00011	x	0		30.00	a	6061450.45	2260243.00	30.00	0.00
								6061569.53	2260243.00	30.00	0.00
								6061566.48	2259913.23	30.00	0.00
								6061446.37	2259912.21	30.00	0.00
BUILDING		BUILDING00012	x	0		30.00	a	6060586.32	2260166.67	30.00	0.00
								6060902.86	2260166.67	30.00	0.00
								6060901.84	2260207.38	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
								6060832.63	2260209.42	30.00	0.00
								6060832.63	2260277.61	30.00	0.00
								6061021.94	2260275.57	30.00	0.00
								6061019.91	2260206.36	30.00	0.00
								6060949.68	2260202.29	30.00	0.00
								6060950.70	2260168.70	30.00	0.00
								6061259.10	2260164.63	30.00	0.00
								6061261.13	2259867.43	30.00	0.00
								6060591.41	2259876.59	30.00	0.00
BUILDING		BUILDING00013	x	0		30.00	a	6060483.51	2261178.97	30.00	0.00
								6060633.86	2261178.97	30.00	0.00
								6060617.67	2260744.09	30.00	0.00
								6060344.71	2260740.62	30.00	0.00
								6060343.56	2261122.30	30.00	0.00
								6060483.51	2261122.30	30.00	0.00
BUILDING		BUILDING00014	x	0		30.00	a	6060739.12	2261209.04	30.00	0.00
								6061204.07	2261203.26	30.00	0.00
								6061200.60	2261089.91	30.00	0.00
								6060740.27	2261093.38	30.00	0.00
BUILDING		BUILDING00015	x	0		30.00	a	6060948.46	2261042.49	30.00	0.00
								6061209.85	2261037.86	30.00	0.00
								6061212.17	2260884.04	30.00	0.00
								6060947.30	2260881.72	30.00	0.00
BUILDING		BUILDING00016	x	0		30.00	a	6060874.44	2260740.62	30.00	0.00
								6061021.33	2260742.93	30.00	0.00
								6061024.80	2260525.49	30.00	0.00
								6060873.28	2260523.18	30.00	0.00
BUILDING		BUILDING00017	x	0		30.00	a	6061116.17	2260805.39	30.00	0.00
								6061243.39	2260808.86	30.00	0.00
								6061245.71	2260489.63	30.00	0.00
								6061115.01	2260497.73	30.00	0.00
BUILDING		BUILDING00018	x	0		30.00	a	6060676.66	2260910.64	30.00	0.00
								6060783.07	2260911.79	30.00	0.00
								6060778.44	2260851.65	30.00	0.00
								6060820.08	2260851.65	30.00	0.00
								6060822.39	2260523.18	30.00	0.00
								6060674.35	2260528.96	30.00	0.00
BUILDING		BUILDING00019	x	0		30.00	a	6060189.21	2262251.80	30.00	0.00
								6061240.61	2262248.13	30.00	0.00
								6061251.64	2261854.77	30.00	0.00
								6060200.24	2261862.13	30.00	0.00
BUILDING		BUILDING00020	x	0		30.00	a	6060946.51	2262909.85	30.00	0.00
								6061163.41	2262909.85	30.00	0.00
								6061159.73	2262854.70	30.00	0.00
								6061233.26	2262851.03	30.00	0.00
								6061229.58	2262564.28	30.00	0.00
								6061100.91	2262567.96	30.00	0.00
								6061082.53	2262663.54	30.00	0.00
								6060935.48	2262678.24	30.00	0.00
BUILDING		BUILDING00021	x	0		30.00	a	6061119.29	2263347.32	30.00	0.00
								6061233.26	2263347.32	30.00	0.00
								6061222.23	2263273.79	30.00	0.00
								6061115.62	2263273.79	30.00	0.00
BUILDING		BUILDING00022	x	0		30.00	a	6061134.00	2263211.30	30.00	0.00
								6061281.05	2263200.27	30.00	0.00
								6061273.69	2263130.42	30.00	0.00
								6061134.00	2263130.42	30.00	0.00
BUILDING		BUILDING00023	x	0		30.00	a	6061420.74	2263306.88	30.00	0.00
								6061501.62	2263420.84	30.00	0.00
								6061663.37	2263420.84	30.00	0.00
								6061652.34	2263148.80	30.00	0.00
								6061431.77	2263112.04	30.00	0.00
BUILDING		BUILDING00024	x	0		30.00	a	6061439.12	2262906.17	30.00	0.00
								6061575.14	2262898.82	30.00	0.00
								6061586.17	2262604.72	30.00	0.00
								6061450.15	2262597.37	30.00	0.00
BUILDING		BUILDING00025	x	0		30.00	a	6061453.83	2263593.62	30.00	0.00
								6061656.02	2263604.65	30.00	0.00
								6061659.70	2263461.28	30.00	0.00
								6061457.50	2263461.28	30.00	0.00
BUILDING		BUILDING00026	x	0		30.00	a	6061817.77	2263597.30	30.00	0.00
								6061994.23	2263593.62	30.00	0.00
								6061983.20	2263159.83	30.00	0.00
								6061821.45	2263163.50	30.00	0.00
BUILDING		BUILDING00027	x	0		30.00	a	6061670.72	2262869.41	30.00	0.00
								6061850.86	2262869.41	30.00	0.00
								6061854.54	2262567.96	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
								6061792.04	2262556.93	30.00	0.00
								6061670.72	2262656.19	30.00	0.00
BUILDING		BUILDING00028	x	0		30.00	a	6061997.91	2262942.93	30.00	0.00
								6062159.66	2262935.58	30.00	0.00
								6062148.63	2262454.00	30.00	0.00
								6061983.20	2262454.00	30.00	0.00
BUILDING		BUILDING00029	x	0		30.00	a	6062034.67	2263450.25	30.00	0.00
								6062196.42	2263453.93	30.00	0.00
								6062207.45	2263358.34	30.00	0.00
								6062810.35	2263350.99	30.00	0.00
								6062788.29	2263119.39	30.00	0.00
								6062019.96	2263126.74	30.00	0.00
BUILDING		BUILDING00030	x	0		30.00	a	6062273.62	2262880.44	30.00	0.00
								6062472.14	2262887.79	30.00	0.00
								6062490.52	2262454.00	30.00	0.00
								6062604.48	2262442.97	30.00	0.00
								6062644.92	2262876.76	30.00	0.00
								6062880.20	2262876.76	30.00	0.00
								6062880.20	2262347.39	30.00	0.00
								6062266.27	2262336.36	30.00	0.00
BUILDING		BUILDING00031	x	0		30.00	a	6062292.00	2262273.86	30.00	0.00
								6062865.49	2262266.51	30.00	0.00
								6062858.14	2261880.51	30.00	0.00
								6062336.12	2261854.77	30.00	0.00
BUILDING		BUILDING00032	x	0		30.00	a	6063035.13	2261936.74	30.00	0.00
								6063036.44	2261863.82	30.00	0.00
								6063764.30	2261865.13	30.00	0.00
								6063772.11	2262018.77	30.00	0.00
								6063838.52	2262016.17	30.00	0.00
								6063845.03	2261815.65	30.00	0.00
								6062997.37	2261824.76	30.00	0.00
								6062989.56	2261939.34	30.00	0.00
BUILDING		BUILDING00033	x	0		30.00	a	6064120.77	2262249.43	30.00	0.00
								6064692.12	2262253.35	30.00	0.00
								6064696.04	2261910.93	30.00	0.00
								6064122.73	2261895.27	30.00	0.00
BUILDING		BUILDING00034	x	0		30.00	a	6064065.98	2262417.71	30.00	0.00
								6064737.13	2262415.75	30.00	0.00
								6064739.08	2262319.87	30.00	0.00
								6064058.16	2262335.53	30.00	0.00
BUILDING		BUILDING00035	x	0		30.00	a	6064095.33	2262947.97	30.00	0.00
								6064656.90	2262942.10	30.00	0.00
								6064649.08	2262715.13	30.00	0.00
								6064155.99	2262738.61	30.00	0.00
BUILDING		BUILDING00036	x	0		30.00	a	6063670.73	2262924.49	30.00	0.00
								6063842.92	2262930.36	30.00	0.00
								6063840.96	2262783.61	30.00	0.00
								6063670.73	2262779.70	30.00	0.00
BUILDING		BUILDING00037	x	0		30.00	a	6063727.47	2262748.39	30.00	0.00
								6063844.88	2262746.43	30.00	0.00
								6063840.96	2262558.59	30.00	0.00
								6063729.43	2262562.50	30.00	0.00
BUILDING		BUILDING00038	x	0		30.00	a	6063731.39	2262468.58	30.00	0.00
								6063868.36	2262474.45	30.00	0.00
								6063862.49	2262325.74	30.00	0.00
								6063733.35	2262321.83	30.00	0.00
BUILDING		BUILDING00039	x	0		30.00	a	6064277.31	2263378.44	30.00	0.00
								6064353.62	2263382.36	30.00	0.00
								6064353.62	2263137.77	30.00	0.00
								6064275.35	2263141.68	30.00	0.00
BUILDING		BUILDING00040	x	0		30.00	a	6063643.34	2263546.72	30.00	0.00
								6063794.00	2263542.81	30.00	0.00
								6063788.13	2263169.08	30.00	0.00
								6063846.83	2263143.64	30.00	0.00
								6063848.79	2263096.68	30.00	0.00
								6063707.91	2263096.68	30.00	0.00
								6063696.17	2263368.66	30.00	0.00
								6063647.25	2263374.53	30.00	0.00
BUILDING		BUILDING00041	x	0		30.00	a	6064118.81	2262621.20	30.00	0.00
								6064206.86	2262621.20	30.00	0.00
								6064210.78	2262482.28	30.00	0.00
								6064120.77	2262480.32	30.00	0.00
BUILDING		BUILDING00042	x	0		30.00	a	6064072.47	2260874.72	30.00	0.00
								6064255.58	2260876.22	30.00	0.00
								6064252.58	2260775.67	30.00	0.00
								6064134.01	2260778.67	30.00	0.00
								6064129.51	2260822.19	30.00	0.00

Name	M.	ID	RB	Residents	Absorption	Height		Coordinates			
						Begin		x	y	z	Ground
						(ft)		(ft)	(ft)	(ft)	(ft)
								6064076.98	2260828.20	30.00	0.00
BUILDING		BUILDING00043	x	0		30.00	a	6064120.50	2260676.61	30.00	0.00
								6064257.08	2260679.61	30.00	0.00
								6064258.58	2260591.06	30.00	0.00
								6064125.00	2260589.56	30.00	0.00
BUILDING		BUILDING00044	x	0		30.00	a	6064143.01	2260492.00	30.00	0.00
								6064240.57	2260507.01	30.00	0.00
								6064233.07	2260443.97	30.00	0.00
								6064143.01	2260436.47	30.00	0.00
BUILDING		BUILDING00045	x	0		30.00	a	6064440.19	2260481.50	30.00	0.00
								6064549.75	2260478.49	30.00	0.00
								6064552.75	2260416.96	30.00	0.00
								6064444.69	2260418.46	30.00	0.00
BUILDING		BUILDING00046	x	0		30.00	a	6064788.39	2260558.04	30.00	0.00
								6064872.44	2260552.04	30.00	0.00
								6064866.43	2260433.47	30.00	0.00
								6064785.39	2260428.96	30.00	0.00
BUILDING		BUILDING00047	x	0		30.00	a	6064573.76	2260654.10	30.00	0.00
								6064689.33	2260651.09	30.00	0.00
								6064689.33	2260577.55	30.00	0.00
								6064764.38	2260571.55	30.00	0.00
								6064771.88	2260412.46	30.00	0.00
								6064725.35	2260415.46	30.00	0.00
								6064726.85	2260543.03	30.00	0.00
								6064549.75	2260547.53	30.00	0.00
BUILDING		BUILDING00048	x	0		30.00	a	6064079.98	2261596.64	30.00	0.00
								6064590.27	2261590.64	30.00	0.00
								6064590.27	2261575.63	30.00	0.00
								6065069.05	2261572.63	30.00	0.00
								6065070.55	2261134.37	30.00	0.00
								6064600.78	2261122.37	30.00	0.00
								6064591.78	2261192.91	30.00	0.00
								6064078.48	2261194.41	30.00	0.00
BUILDING		BUILDING00050	x	0		30.00	a	6063562.18	2260685.61	30.00	0.00
								6063665.74	2260679.61	30.00	0.00
								6063667.24	2260658.60	30.00	0.00
								6063928.39	2260646.59	30.00	0.00
								6063922.39	2260591.06	30.00	0.00
								6063569.68	2260586.56	30.00	0.00