



April 24, 2023

Mr. Angel Orozco
GREENS DEVELOPMENT
16530 Bake Parkway, 2nd Floor
Irvine, California 92618

RE: C-Store Gas Station and QSR (2nd & SR-91) Construction Noise Memorandum
Project No. 19633

Dear Mr. Orozco:

Ganddini Group, Inc. is pleased to provide this Construction Noise Memorandum for the C-Store Gas Station and QSR (2nd & SR-91) project. The 1.4-acre project site is located between 2nd Street and the eastbound on-ramp for the State Route 91 Freeway in the City of Corona, California. The project site is currently vacant.

The proposed project involves construction of a 3,750 square foot convenience store gas station with seven fuel pumps (14 vehicle fueling positions) and a 1,900 square foot quick service restaurant with drive through window.

EXISTING LAND USES IN THE PROJECT VICINITY

The project site is bordered by the eastbound on-ramp of the State Route 91 Freeway (SR-91) to the north and west and 2nd Street to the south and east.

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple-family residential, including transient lodging, motels and hotel uses make up the majority of these areas. Existing sensitive land uses that may be affected by project noise include the existing multi-family residential uses located approximately 460 feet southeast (along Buena Vista Avenue), 570 feet south, and 781 feet west (along D Street); the mobile home parks located approximately 796 feet southwest (along Lincoln Avenue) and 315 feet north (across SR-91); the school use located approximately 327 feet southeast (along Buena Vista Avenue); and the transient lodging use located approximately 645 feet west (along Lincoln Avenue) of the project site.

APPLICABLE STANDARDS

City of Corona General Plan 2020-2040¹

Applicable policies and standards governing noise in the City are set forth in the General Plan Noise Element. Those applicable to the proposed project are presented below:

Goal N-2 Prevent and mitigate the adverse impacts of excessive ambient noise exposure, including

¹ <https://www.coronaca.gov/government/departments-divisions/planning-division/general-plan-update>

vibration on residents, employees, visitors, and “noise sensitive” land uses.

Policy N-2.7 Require construction activities that occur in close proximity to existing “noise sensitive” uses, including schools, libraries, health care facilities, and residential uses, to limit the hours and days of operation in accordance with the City Noise Ordinance.

City of Corona Municipal Code²

Section 17.84.040(D)(2) Special Provisions – Construction Noise

Construction noise is prohibited between the hours of 8:00 PM to 7:00 AM, Monday through Saturday and 6:00 PM to 10:00 AM on Sundays and federal holidays. Construction noise is defined as noise which is disturbing, excessive or offensive and constitutes a nuisance involving discomfort or annoyance to persons of normal sensitivity residing in the area, which is generated by the use of any tools, machinery or equipment used in connection with construction operations.

DISCUSSION AND RECOMMENDATIONS

As stated above, the closest existing sensitive receptors that may be affected by short-term noise impacts associated with project construction noise are located between 315 and 796 feet from the boundaries of the project site. Construction noise will vary depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of the construction work. A summary of noise level data for a variety of construction equipment compiled by the U.S. Department of Transportation is presented in Table 1.

Construction noise sources are regulated within the City of Corona under Section 17.84.040(D)(2) of the City’s Municipal Code which prohibits construction activities other than between the hours of 7:00 AM to 8:00 PM Monday through Saturday and 10:00 AM to 6:00 PM on Sundays and federal holidays.

Project construction will not occur outside of the hours outlined in City of Corona Municipal Code Section 17.84.040(D)(2). Therefore, the project would not exceed City-established standards relating to construction noise. The project impact is less than significant; no mitigation is required.

² https://codelibrary.amlegal.com/codes/corona/latest/corona_ca/0-0-0-33686

Table 1 (1 of 2)
CA/T Equipment Noise Emissions and Acoustical Usage Factor Database

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec. Lmax @ 50ft (dBA, slow)	Actual Measured Lmax @ 50ft (dBA, slow)	No. of Actual Data Samples (Count)
All Other Equipment > 5 HP	No	50	85	-N/A-	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	-N/A-	0
Blasting	Yes	-N/A-	94	-N/A-	0
Boring Jack Power Unit	No	50	80	83	1
Chain Saw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	-N/A-	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Forklift ^{2,3}	No	50	n/a	61	n/a
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25KVA, VMS signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	-N/A-	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hydr. Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	-N/A-	0
Impact Pile Driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact hammer (hoe ram)	Yes	20	90	90	212
Pavement Scarafier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	50	85	77	9
Paving Equipment	No	50	85	77	9
Pneumatic Tools	No	50	85	85	90

Table 1 (2 of 2)
CA/T Equipment Noise Emissions and Acoustical Usage Factor Database

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec. Lmax @ 50ft (dBA, slow)	Actual Measured Lmax @ 50ft (dBA, slow)	No. of Actual Data Samples (Count)
Pumps	No	50	77	81	17
Refrigerator Unit	No	100	82	73	3
Rivit Buster/chipping gun	Yes	20	85	79	19
Rock Drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand Blasting (Single Nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Shears (on backhoe)	No	40	85	96	5
Slurry Plant	No	100	78	78	1
Slurry Trenching Machine	No	50	82	80	75
Soil Mix Drill Rig	No	50	80	-N/A-	0
Tractor	No	40	84	-N/A-	0
Vacuum Excavator (Vac-truck)	No	40	85	85	149
Vacuum Street Sweeper	No	10	80	82	19
Ventilation Fan	No	100	85	79	13
Vibrating Hopper	No	50	85	87	1
Vibratory Concrete Mixer	No	20	80	80	1
Vibratory Pile Driver	No	20	95	101	44
Warning Horn	No	5	85	83	12
Welder/Torch	No	40	73	74	5

Notes:

- (1) Source: FHWA Roadway Construction Noise Model User's Guide January 2006.
- (2) Warehouse & Forklift Noise Exposure - NoiseTesting.info Carl Stautins, November 4, 2014
<http://www.noisetesting.info/blog/carl-straatins/page-3/>
- (3) Data provided Leq as measured at the operator. Sound Level at 50 feet is calculated using Inverse Square Law.

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CONCLUSIONS

Noise impacts associated with construction of the proposed C-Store Gas Station and QSR (2nd & SR-91) project are anticipated to be compliant with the City's noise ordinance and other applicable noise regulations.

It has been a pleasure to assist you with this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 975-3100.

Sincerely,
GANDDINI GROUP, INC.



Catherine Howe, M.S.
Noise & Air Quality Analyst