Appendix FNoise Technical Memorandum, SDSU Plaza Linda Verde
EIR Addendum, DUDEK, March 2014



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TECHNICAL MEMORANDUM

To:	Laura Shinn, Director, Facilities Planning, San Diego State University						
From:	Mike Greene, Environmental Specialist/Acoustician						
Cc:	Michael Haberkorn, Gatzke, Dillon & Ballance						
Subject:	San Diego State University Plaza Linda Verde EIR Addendum – Noise Impact						
	Analysis						
Date:	March 25, 2014						
Attachments:	Figures 1–4						

This memorandum provides the noise analysis for proposed revisions to the previously approved San Diego State University (SDSU) Plaza Linda Verde project located in San Diego, California, and is prepared as part of an Addendum to the Plaza Linda Verde Final Environmental Impact Report (EIR) (May 2011).

The memorandum is intended to (1) briefly summarize the noise impacts and significance conclusions identified in the May 2011 SDSU Plaza Linda Verde Final EIR and (2) discuss whether the proposed revisions would result in new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the May 2011 Final EIR.

1 PROJECT LOCATION AND DESCRIPTION

The proposed project site is located on the SDSU campus, within the College Area of the City of San Diego (City), San Diego County, California (see Figure 1, Regional Map, and Figure 2, Vicinity Map). Specifically, the project site is located generally between Aztec Walk and Montezuma Road in the southeastern portion of campus (see Figure 3, Project Area).

The proposed project consists of a mixed-use project that would straddle both the east and west sides of College Avenue between the SDSU Transit Center/Pedestrian Bridge and Montezuma Road (see Figure 4, Proposed Site Plan). The proposed project would include commercial/retail uses on the first floor of several buildings and residential uses on the upper floors. A stand-alone parking structure would also be constructed west of College Avenue. The project was analyzed in the Plaza Linda Verde EIR, which was finalized and certified in May 2011. Table 1 provides a summary of all buildings proposed and analyzed in the May 2011 Final EIR.

As SDSU has proceeded with preliminary project planning and design, several modifications to the approved project are being proposed. These changes include modifications to Buildings 1, 2, and 3 (all located west of College Avenue) and are summarized in Table 2. No changes to Buildings 4, 5, 6, or 7 would occur; however, details related to these buildings have been provided in Tables 1 and 2 for informational purposes. Additionally, no changes to the building footprints or project area are proposed.

	Total	Retail	Rentable	Residential	Housing Units				
Project Components	Size (GSF)	Square Feet (GSF)	Square Feet (SF)	Square Feet (GSF)	Apartment Style	Dormitory Style	Beds	Parking Spaces	Building Stories
Building 1	118,550	25,000	24,340	93,550	84	0	352	0	5
Building 2	85,640	20,000	17,975	65,640	60	0	264	0	5
Building 3 (Parking Structure)	128,925	2,000	1,815	0	0	0	0	342	5*
Building 4	123,004	23,000	13,445	100,004	63	0	256	69–110	5
Building 5	157,971	20,000	19,634	137,971	87	0	344	91–110	5
Building 6	48,070	0	0	48,070	44	0	192	0	4
Building 7	55,300	0	0	55,300	52	0	224	0	4
Total	717,460	90,000	77,209	500,535	390	0	1,632	502-562	n/a

Table 1Approved – May 2011 Plaza Linda Verde Final EIR

Notes:

GSF = gross square feet.

*The approved parking structure consisted of one subterranean story and four aboveground stories.

Table 2Revised – March 2014 Addendum to the May 2011 Plaza Linda Verde Final EIR

	Total	Retail	Rentable	Residential	Housing Units				
Project Components	Size (GSF)	Square Feet (GSF)	Square Feet (SF)	Square Feet (GSF)	Apartment Style	Dormitory Style	Beds	Parking Spaces	Building Stories
Building 1*	139,329	20,553	19,902	119,329	85**	187	359	0	6
Building 2*	117,387	14,868	14,056	102,519	68**	158	300	0	6
Building 3 (Parking Structure)*	143,693	0	0	0	0	0	0	392	7
Building 4	123,004	23,000	13,445	100,004	63	0	256	69–110	5
Building 5	157,971	20,000	19,634	137,971	87	0	344	91–110	5
Building 6	48,070	0	0	48,070	44	0	192	0	4
Building 7	55,300	0	0	55,300	52	0	224	0	4
Total	784,754	78,421	67,037	563,193	399	345	1,675	552-612	n/a

Notes:

*Buildings that have changed since the May 2011 Final EIR and are the subject of the March 2014 Addendum analysis.

Apartment equivalent has been calculated. The total housing units planned for Buildings 1 and 2 should be conveyed in either "apartment style" or "dormitory style" numbers, not both. For example, Building 1 would include 85 apartment style units **OR 187 dormitory style units, not both. GSF = gross square feet.



As indicated in Table 2, the proposed changes to the previously approved project would include a change in residential units from apartment-style units to dormitory-style rooms. Table 2 shows the number of dormitory-style rooms (345) that would be built in Buildings 1 and 2 and their associated apartment-style equivalent (153). Other changes include an increase in total gross square footage from 717,460 to 784,754; a decrease in retail gross square footage from 90,000 to 78,421; an increase in residential gross square footage from 1,632 to 1,675; and the addition of 50 parking spaces to Building 3. The increased square footage is associated with an increase in one additional floor to Buildings 1 and 2, and two additional stories to Building 3. The additional floor would add approximately 11 feet in height to Buildings 1 and 2. The additional three aboveground floors to Building 3 would result in a building height of 100 feet.

2 METHODS

Methods used to prepare the original noise impact analysis outlined in the May 2011 Final EIR include ambient noise measurements that were taken to quantify the existing daytime noise environment at the project site. In order to assess the magnitude of change in the noise environment that would result from the proposed project, the anticipated noise and vibration levels associated with the proposed construction-related activities were obtained from (1) reports prepared by the Federal Transit Administration and California Department of Transportation, and (2) field data from the May 2011 Final EIR. Various assumptions regarding the hours of construction, types of construction equipment, duration of construction activities, etc., were based on information provided by SDSU. The noise level associated with traffic on selected roadways was determined using the ambient noise measurements and the Federal Highway Administration's TNM 2.5 Traffic Noise Prediction Model.

The potential for a change in any of the noise impact determinations made in the originally approved Plaza Linda Verde EIR was analyzed by first examining which of the components of the project would be altered (such as the number of floors and changes in square footage). The proposed modifications were evaluated qualitatively to determine whether they would materially affect typical daily construction and/or operational noise levels, and the associated findings of impact (i.e., significant or less than significant).

3 SUMMARY OF PLAZA LINDA VERDE EIR IMPACTS AND CONCLUSIONS

3.1 Exposure of Noise in Excess of Standards

Construction Noise. The EIR noise analysis determined that construction noise levels may exceed the City's 75 decibel (dB) equivalent level (L_{eq}) (12-hour average) noise impact criterion at the closest off-site existing residences located west of proposed Buildings 1, 6, and 7, and at on-campus housing adjacent to proposed Buildings 4 and 5. Therefore, project-related construction activities at the project site were determined to be a potentially significant impact.

Operational Noise. The EIR noise analysis determined that future traffic noise levels at the facades of Buildings 1 and 5 would range up to approximately 72 dB Community Noise Equivalent Level (CNEL), and that Buildings 2 and 4 would be exposed to traffic noise of as much as 74 dB CNEL. Because exterior usable space areas are not proposed for these areas, the exterior noise impact would be less than significant. However, it was determined that the resultant interior noise levels within Buildings 1, 2, 4, and 5 could exceed the City and State of California noise standard of 45 dB CNEL. Therefore, the noise level from traffic within the student apartments was found to be a potentially significant impact.

Additionally, the EIR noise analysis determined that nose-sensitive land uses could be exposed to noise from outdoor mechanical equipment, such as heating, ventilation, and air conditioning (HVAC) units in excess of standards established in the local noise ordinance; this is a potentially significant impact.

3.2 Groundborne Vibration

The EIR noise analysis found that construction-related activities are not anticipated to expose persons to or generate groundborne vibration levels in excess of 0.10 inches per second peak particle velocity, which is the threshold of annoyance used by agencies such as the California Department of Transportation. Therefore, potential impacts from groundborne vibration were determined to be less than significant.

3.3 Permanent Increase in Ambient Noise Levels

The EIR noise analysis determined that at project build-out (Year 2015), the additional project traffic, in combination with cumulative traffic, would increase the noise along the adjacent roads by 1 dB CNEL or less. Therefore, it was found that the proposed project would not result in a substantial increase in ambient noise levels in the project vicinity above existing levels, and near-term impacts would be less than significant.

With respect to long-term (2030) impacts, the EIR noise analysis found that Year 2030 traffic noise levels would increase by up to 3 dB CNEL over existing levels along portions of College Avenue and Montezuma Road without project traffic. However, the Year 2030 with project increase in noise levels over existing levels would essentially be the same as Year 2030 without project noise levels. Therefore, the noise level increase associated with the proposed project in the long-term would be nominal and the project's impacts on long-term noise levels would be less than significant.

3.4 Temporary Increase in Ambient Noise Levels

Temporary increases in ambient noise levels would be limited to potential impacts from construction activities, as addressed in Section 3.1.

3.5 Location of Project within Airport Land Use Plan or Public Airport

As noted in the EIR's noise analysis, the project site is not located in close proximity to an airport. The closest airport is Montgomery Field, which is located approximately 3 miles northwest of the site. The project site is subject to occasional overflights by helicopters, as well as commercial and general aviation aircraft. However, the campus is not located within the 60 dB CNEL noise contour of any airport and is not subject to aircraft noise in excess of regulatory limits. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with aircraft.

3.6 Location of Project within Vicinity of Private Airstrip

As noted in the EIR's noise analysis, the project site is not located in proximity to any private airstrips. Therefore, no impact would occur.

4 ANALYSIS OF PROJECT CHANGES

Based upon the summary of proposed project modifications shown in Table 2, the impact analyses and conclusions contained in the EIR's noise analysis would remain valid. Although the overall project duration may increase somewhat as a result of construction of the additional floor for Buildings 1, 2, and3 (from five to six floors), construction methods, type of equipment, etc. would remain the same. Therefore, hourly and daily noise levels from construction would be comparable to the levels originally estimated; therefore, the resulting noise impacts would be the same.

Similarly, on an operational level, there would be a decrease in traffic volumes over what was disclosed in the 2011 Final EIR. This decrease in trips would be due primarily to the reduction in

retail square footage and the corresponding reduction in vehicle trips. Therefore, the traffic volumes used in the EIR's noise analysis are overstating impacts.

5 CONCLUSIONS

Based on a review of the Plaza Linda Verde Final EIR and the revisions now proposed to the approved project, the proposed revisions would not result in any new significant effects, nor would the revisions result in a substantial increase in the severity of significant effects previously identified in the Final EIR. Because no new significant impacts would occur, nor would there be a substantial increase in the severity of previously identified significant effects, no additional mitigation measures beyond those identified in the May 2011 Plaza Linda Verde Final EIR would be required.

6 **REFERENCES**

SDSU (San Diego State University). 2011. *Final Environmental Impact Report. Plaza Linda Verde. State Clearinghouse No. 2009011040.* Prepared for Board of Trustees of the California State University. Prepared by San Diego State University. May 2011.

7 LIST OF PREPARERS

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Sincerely,

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Project Area



SDSU Plaza Linda Verde Noise Impact Analysis



Figure 4 Proposed Site Plan