## Appendix F Supplemental Noise Analysis



То	David Weil/ Harvard-Westlake	Project number			
		2020128			
СС	Amir Yazdanniyaz/ AES	File reference			
	Edgard Khalatian/ Mayer Brown	M-HW-Pool_12.16.22			
From	Sean Bui, PE	Date			
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Subject	Harvard-Westlake River Park Project EIR Supplemental Noise Analysis – Updated Pool Design				

This report provides the results of the supplemental noise analysis, prepared by Acoustical Engineering Services (AES) to determine whether the proposed updated pool design for the Harvard-Westlake River Park Project (Updated Design) could result in any new noise impacts than analyzed in the Draft Environmental Impact Report (Original Design).

The updated pool design would replace the 30-foot overhead canopy with an 18-foot overhead roof above the bleachers and revisions to the support buildings.

## Operation Noise

Noise analysis was carried out for the updated pool and associated buildings. Table 1 (on page 2) presents the estimated noise levels with the proposed updated pool operation in terms of  $L_{eq}$  and  $L_{10}$  noise descriptors. As indicated in Table 1, the estimated noise levels with the updated pool design would result in a maximum noise increase of 3.5 dBA at receptor R3. However, the estimated noise levels for the updated pool design would remain below the significance thresholds for both  $L_{eq}$  and  $L_{10}$  noise descriptors.

Table 2 (on page 3) presents the estimated noise levels (in terms of  $L_{eq}$ ) at the off-site sensitive receptors, resulting from use of Project outdoor athletic fields. As presented in Table 2, the estimated noise levels from the outdoor athletic activities with the updated pool design would be below the significance threshold of 5 dBA ( $L_{eq}$ ) increase above the ambient noise levels at all receptors, similar to the Original Design.

Table 3 (on page 3) presents the estimated outdoor athletic activities noise levels (in terms of  $L_{10}$ ) at the offsite sensitive receptors. As indicated in Table 3, the estimated noise levels from the outdoor athletic activities would be below the significance threshold of a 10 dBA increase above ambient noise levels. Therefore, noise impacts from outdoor athletic activities would be less than significant, similar to the Original Design.

Table 1
Estimated Pool Operation Noise Levels- Updated Design

	Estimated		s from Swim BA	ming Pool,		Noise Levels al Design to			
	L	eq	$L_{10}$			esign, dBA	Significance Threshold <sup>a</sup>		
Receptor Location	Original Updated Design Design		Original Design	Updated Design	$ m L_{eq}$	${ m L}_{10}$	$ m L_{eq}$	${f L_{10}}$	
R1	46.6	45.8	49.0	47.9	0.0	0.0	55.5	60.5	
R2	46.7	46.7	49.1	48.8	0.0	0.0	56.1	61.1	
R3	48.5	52.0	50.9	54.2	3.5	3.3	58.0	63.0	
R4	61.0	59.0	63.3	61.2	0.0	0.0	63.5	68.5	
R5	64.2	63.5	66.5	65.5	0.0	0.0	69.6	74.6	
R6	58.4	59.9	60.8	61.9	1.5	1.1	69.6	74.6	
R7	49.9	51.6	52.2	53.6	1.7	1.4	62.1	67.1	

## Notes:

Source: AES, 2022.

Table 4 (on page 4) presents the estimated composite noise levels from the Updated Design-related noise sources in terms of CNEL. As indicated in Table 4, the Updated Design would result in a maximum increase of 0.7 dBA CNEL at receptor R2 to 3.0 dBA CNEL at receptor R7. The increases in noise levels due to Updated Design operations at off-site receptors R1 through R4, and R7 would be below the 5 dBA CNEL significance threshold and the estimated noise levels would fall within the conditionally acceptable (60 to 70 CNEL) land use category for residential. The estimated noise level increase at off-site receptors R5 and R6 would be below the 3 dBA CNEL significance threshold, as the estimated noise levels would fall within the normally unacceptable (70 to 75 CNEL) land use category for residential and the normally unacceptable (70 to 80 CNEL) land use category for churches. Therefore, the composite noise level impacts due to Updated Design operation would be less than significant, similar to the Original Design.

<sup>&</sup>lt;sup>a</sup> Significance thresholds are equivalent to the measured ambient noise levels plus 5 dBA for  $L_{eq}$  per the City of Los Angeles Noise Regulations and plus 10 dBA for  $L_{10}$ .

Table 2. Athletic Activities Noise Levels – Leq Analysis (Updated Design)

	Existing	Estimated	Noise from (	Outdoor Uses,	dBA (Leq)	Total	Ambient			
Receptor Location	Ambient Noise Levels, dBA (L <sub>eq</sub> )	Field A	Field B	Swimming Pool	Tennis Courts	Project Noise Levels, dBA (L <sub>eq</sub> )	+ Project Noise Levels, dBA (Leq)	Significance Threshold <sup>a</sup>	Exceed over Significance Threshold	Significant Impact?
R1	50.5	40.6	51.1	45.8	25.1	52.5	54.6	55.5	0.0	No
R2	51.1	40.6	50.1	46.7	26.7	52.1	54.6	56.1	0.0	No
R3	53.0	42.9	51.4	52.0	30.5	55.0	57.1	58.0	0.0	No
R4	58.5	50.9	48.0	59.0	42.2	60.0	62.3	63.5	0.0	No
R5	64.6	54.3	45.9	63.5	40.5	64.1	67.4	69.6	0.0	No
R6	64.6	55.1	42.9	59.9	34.1	61.2	66.2	69.6	0.0	No
R7	57.1	45.5	45.2	51.6	25.1	53.3	58.6	62.1	0.0	No

Notes:

Source: AES, 2022

Table 3. Athletic Activities Noise Levels – L<sub>10</sub> Analysis (Updated Design)

Receptor Location	Existing Ambient Noise Levels, dBA (L <sub>eq</sub> )	Estimated Field A	Noise from (	Outdoor Uses, Swimming Pool	dBA (L <sub>10</sub> )  Tennis Courts	Total Project Noise Levels, dBA (L <sub>10</sub> )	Ambient (Leq)+ Project Noise Levels (L10), dBA (L10)	Significance Threshold <sup>a</sup>	Exceed over Significance Threshold	Significant Impact?
R1	50.5	51.4	56.7	47.9	28.1	58.2	58.9	60.5	0.0	No
R2	51.1	51.2	56.4	48.8	29.7	58.1	58.9	61.1	0.0	No
R3	53.0	53.4	57.4	54.2	33.5	60.1	60.9	63.0	0.0	No
R4	58.5	61.4	54.3	61.2	45.2	64.8	65.7	68.5	0.0	No
R5	64.6	65.0	50.6	65.5	43.5	68.4	69.9	74.6	0.0	No
R6	64.6	66.1	47.9	61.9	37.1	67.6	69.3	74.6	0.0	No
R7	57.1	56.0	50.2	53.6	28.1	58.6	61.0	67.1	0.0	No

Notes:

Source: AES, 2022

<sup>&</sup>lt;sup>a</sup> Significance thresholds are equivalent to the measured ambient noise levels plus 5 dBA, per the City of Los Angeles Noise Regulations.

 $<sup>^</sup>a$  Significance thresholds are equivalent to the measured ambient noise levels plus 10 dBA.

Table 4. Composite Noise Impacts (Updated Design)

	Calcu	lated Project-F	Related Noise	Levels, CNI	EL (dBA)			Ambient	Increase		
Receptor Location	Traffic	Mechanical	Athletic Activities	Parking	Special Events <sup>c</sup>	Project Composite Noise Levels, CNEL (dBA)	Ambient Noise Levels, <sup>a</sup> CNEL (dBA)	Plus Project Composite Noise Levels, CNEL (dBA)	in Noise Levels Due to Project, CNEL (dBA)	Significance Threshold <sup>b</sup>	Significant Impact?
R1	43.2	42.8	47.5	10.3	48.0	52.0	53.8	56.0	2.2	58.8	No
R2	43.6	42.7	47.2	10.9	46.4	51.4	59.1	59.8	0.7	64.1	No
R3	44.6	46.4	50.3	13.0	48.9	54.1	59.2	60.4	1.2	64.2	No
R4	48.4	43.5	55.7	24.0	57.5	60.1	61.4	63.8	2.4	66.4	No
R5	60.2	54.6	59.8	22.5	60.4	65.3	68.4	70.1	1.7	71.4	No
R6	60.2	52.9	56.8	25.0	64.1	66.3	67.7	70.1	2.4	70.7	No
R7	53.9	43.4	48.8	24.4	55.1	58.3	58.2	61.2	3.0	63.2	No

## Notes:

Source: AES, 2022

Ambient in CNEL levels are estimated based on the short-term ambient noise measurements based on FTA procedures.

Significance criteria are equivalent to the existing ambient plus 3 dBA if the estimated noise levels (ambient plus Project) fall within the "normally unacceptable" or "clearly unacceptable" land use categories or ambient plus 5 dBA if the estimated noise levels fall within the "normally acceptable" or "conditionally acceptable" land use categories, per the City of Los Angeles Noise Element. If the estimated noise levels exceed those significance criteria, a noise impact is identified.

<sup>&</sup>lt;sup>c</sup> Based on estimated noise levels for the School-related special events, as conservative analysis.