**Building Name: Easton Stadium** 

CAAN ID: 4303

Auxiliary Building ID: 4303.4



## FORM 1 CERTIFICATE OF SEISMIC PERFORMANCE LEVEL

☑ UC-Designed & Constructed Facility☐ Campus-Acquired or Leased Facility

#### **BUILDING DATA**

Building Name: Easton Stadium - Outfield Storage Address: 100 De Neve Dr. Los Angeles, CA 90024

Site location coordinates: Latitude 34.07389225 Longitudinal -118.4424168

## UCOP SEISMIC PERFORMANCE LEVEL (OR "RATING"): V

ASCE 41-17 Model Building Type:

a. Longitudinal Direction: MH (Manufactured Housing)b. Transverse Direction: MH (Manufactured Housing)

Gross Square Footage: 200 Number of stories *above* grade: 1

Number of basement stories below grade: 0

Year Original Building was Constructed: Unknown Original Building Design Code & Year: Unknown

Retrofit Building Design Code & Code (if applicable): N/A

#### **SITE INFORMATION**

Site Class: D Basis: Inferred

Geologic Hazards:

Fault Rupture: No Basis: CGS Earthquake Hazards Zone Application Liquefaction: Yes Basis: CGS Earthquake Hazards Zone Application Basis: CGS Earthquake Hazards Zone Application

#### **ATTACHMENT**

Original Structural Drawings: (N/A, N/A, N/A, N/A) or

Seismic Evaluation: (Easton Stadium - Outfield Storage Seismic Evaluation, KPFF, 4/14/2021, FEMA 154

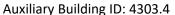
Rapid Visual Screening)

Retrofit Structural Drawings: (N/A, N/A, N/A, N/A)

Date: Apr 14, 2021

**Building Name: Easton Stadium** 

CAAN ID: 4303





**CERTIFICATION & PRESUMPTIVE RATING VERIFICATION STATEMENT** 

I, Mark Hershberg, a California-licensed structural engineer, am responsible for the completion of this certificate, and I have no ownership interest in the property identified above. My scope of review to support the completion of this certificate included both of the following ("No" responses must include an explanation):

<ul> <li>a) the review of structural drawings indicating that they are as-built or record drawings, or that they otherwise are the basis for the construction of the building: ☐ Yes ☑ No</li> <li>b) visiting the building to verify the observable existing conditions are reasonably consistent with those shown on the structural drawings: ☑ Yes ☐ No</li> </ul>
No as-built drawings were available, so evaluation performed using FEMA 154 Level 2 Rapid Visual Screening protocol on visual observations only.
Based on my review, I have verified that the UCOP Seismic Performance Level (SPL) is presumptively permitted by the following UC Seismic Program Guidebook provision (choose one of the following):
$\Box$ 1) Contract documents indicate that the original design and construction of the aforementioned building is in accordance with the benchmark design code year (or later) building code seismic design provisions for UBC or IBC listed in Table 1 below.
$\ensuremath{ \ensuremath{ \   \square} }$ 2) The existing SPL rating is based on an acceptable basis of seismic evaluation completed in 2006 or later.
□ 3) Contract documents indicate that a comprehensive¹ building seismic retrofit design was fully-constructed with an engineered design based on the 1997 UBC/1998 <i>or later</i> CBC, and (choose one of the following):
□ the retrofit project was completed by the UC campus. Further, the design was based on ground motion parameters, at a minimum, corresponding to BSE-1E (or BSE-R) and BSE-2E (or BSE-C) as defined in ASCE 41, or the full design basis ground motion required in the 1997 UBC/1998 CBC <i>or later</i> for EXISTING buildings, and is presumptively assigned an SPL rating of IV. □ the retrofit project was completed by the UC campus. Further, the design was based on ground motion parameters, at a minimum, corresponding to BSE-1 (or BSE-1N) and BSE-2 (or BSE-2N) as defined in ASCE 41, or the full design basis ground motion required in the 1997 UBC/1998 <i>or later</i> CBC for NEW buildings, and is presumptively assigned an SPL rating of III. □ the retrofit project was not completed by the UC campus following UC policies, and is presumptively assigned an SPL rating of IV.

Date: Apr 14, 2021

<sup>&</sup>lt;sup>1</sup> A comprehensive retrofit addresses the entire building structural system as indicated by the associated seismic evaluation, as opposed to addressing selective portions of the structural system.

**Building Name: Easton Stadium** 

CAAN ID: 4303

Auxiliary Building ID: 4303.4



Date: Apr 14, 2021

#### **CERTIFICATION SIGNATURE**

Mark Hershberg Principal
Print Name Title

\$5078 6/30/2021
CA Professional Registration No. License Expiration Date

4/14/2021
Signature Date

KPFF Inc., (213) 418-0201, 700 S. Flower St., Suite 2100, Los

Angeles, CA 90017

Firm Name, Phone Number, and Address

**AFFIX SEAL HERE** 



**Building Name: Easton Stadium** 

**CAAN ID: 4303** 

Auxiliary Building ID: 4303.4



Date: Apr 14, 2021

Table 1: Benchmark Building Codes and Standards

	Building Seismic Design Provisions					
Building Type <sup>a,b</sup>	UBC	IBC				
Wood frame, wood shear panels (Types W1 and W2)	1976	2000				
Wood frame, wood shear panels (Type W1a)	1976	2000				
Steel moment-resisting frame (Types S1 and S1a)	1997	2000				
Steel concentrically braced frame (Types S2 and S2a)	1997	2000				
Steel eccentrically braced frame (Types S2 and S2a)	1988 <sup>g</sup>	2000				
Buckling-restrained braced frame (Types S2 and S2a)	f	2006				
Metal building frames (Type S3)	f	2000				
Steel frame with concrete shear walls (Type S4)	1994	2000				
Steel frame with URM infill (Types S5 and S5a)	f	2000				
Steel plate shear wall (Type S6)	f	2006				
Cold-formed steel light-frame construction—shear wall system (Type CFS1)	1997 <sup>h</sup>	2000				
Cold-formed steel light-frame construction—strap-braced wall system (Type CFS2)	f	2003				
Reinforced concrete moment-resisting frame (Type C1) <sup>i</sup>	1994	2000				
Reinforced concrete shear walls (Types C2 and C2a)	1994	2000				
Concrete frame with URM infill (Types C3 and C3a)	f	f				
Tilt-up concrete (Types PC1 and PC1a)	1997	2000				
Precast concrete frame (Types PC2 and PC2a)	f	2000				
Reinforced masonry (Type RM1)	1997	2000				
Reinforced masonry (Type RM2)	1994	2000				
Unreinforced masonry (Type URM)	f	f				
Unreinforced masonry (Type URMa)	f	f				
Seismic isolation or passive dissipation	1991	2000				

Note: This table has been adapted from ASCE 41-17 Table 3-2. Benchmark Building Codes and Standards for Life Safety Structural Performed at BSE-1E.

Note: UBC = Uniform Building Code . IBC = International Building Code .

 $<sup>^{\</sup>rm a}\,$  Building type refers to one of the common building types defined in Table 3-1 of ASCE 41-17.

<sup>&</sup>lt;sup>b</sup> Buildings on hillside sites shall not be considered Benchmark Buildings.

<sup>&</sup>lt;sup>c</sup> not used

<sup>&</sup>lt;sup>d</sup> not used

e not used

<sup>&</sup>lt;sup>f</sup> No benchmark year; buildings shall be evaluated in accordance with Section III.J.

<sup>&</sup>lt;sup>g</sup> Steel eccentrically braced rames with links adjacent to columns shall comply with the 1994 UBC Emergency Provisions, published September/October 1994, or subsequent requirements.

 $<sup>^{\</sup>it h}$  Cold-formed steel shear walls with wood structural panels only.

<sup>&</sup>lt;sup>1</sup> Flat slab concrete moment frames shall not be considered Benchmark Buildings.



## **UCLA – Easton Stadium (Outfield Storage)**

DATE: 4/14/2021

**FEMA 154 Rapid Visual Screening** 

**Minimum Building Report Information** 

#### **BUILDING DATA**

Campus: UCLA

Building Name: Easton Stadium - Outfield Storage

**CAAN ID: 4303** 

Auxiliary Building ID: 4303.4

Address: 100 De Neve Dr. Los Angeles, CA 90024

Site location coordinates: Latitude 34.07389225 Longitudinal -118.4424168







ASCE 41-17 Model Building Type:

a. Longitudinal Direction: MH (Manufactured Housing)

b. Transverse Direction: MH (Manufactured Housing)

## Site-specific Ground Motion Study? No

Seismic Design Acceleration Parameters of Interest:

a. For BSE-1E  $S_{XS}$ =0.895g and  $S_{X1}$ =0.515g b. For BSE-2E  $S_{XS}$ =1.53g and  $S_{X1}$ =0.941g

### Estimated Fundamental Period (seconds)

a. Longitudinal: Unknownb. Transverse: Unknown

Gross Square Footage: 200

Number of stories above grade: 1

Number of basement stories below grade: 0

Year Original Building was Constructed: Unknown Original Building Design Code & Year: Unknown

Retrofit Building Design Code & Code (if applicable): N/A

#### SITE INFORMATION

Site Class: D Basis: Inferred

Geologic Hazards:

Fault Rupture: No
Liquefaction: Yes
Basis: CGS Earthquake Hazards Zone Application
Basis: CGS Earthquake Hazards Zone Application
Landslide: Yes
Basis: CGS Earthquake Hazards Zone Application

### UCOP SEISMIC PERFORMANCE RATING (OR "RATING"): ∨

## "BALLPARK" RETROFIT COST (if applicable)

$\boxtimes$	Minor	(<\$50/sf	)
-------------	-------	-----------	---

☐ Moderate (~\$50-\$200/sf)

☐ Major (>\$200/sf)

## SUMMARY TIER 1 SEISMIC EVALUATION STRUCTURAL NON-COMPLIANCES/FINDINGS SIGNIFICANTLY AFFECTING RATING DETERMINATION

Significant Structural Deficiencies, Potentially Affecting Seismic Performance Level Designation:

Lateral System Stress Check (wall shear, column shear or flexure, or brace axial as
applicable)

Lateral System Detailing (reinforcement ratio, confinement, aspect ratio, etc)

Adjacent Buildings

Weak Story

■ Soft Story

Geometry (vertical irregularities)

Torsion

Mass – Vertical Irregularity

Cripple Walls

■ Wood Sills (bolting)

Diaphragm Continuity

Openings at Shear Walls (concrete or masonry)

Liquefaction

Slope Failure
Surface Fault Rupture
Masonry or Concrete Wall Anchorage at Diaphragm
URM wall height to thickness ratio
URM Parapets or Cornices
URM Chimney
Heavy Partitions Braced by Ceilings
Appendages

#### POTENTIAL FALLING HAZARDS

	Heavy ceilings, features or ornamentation above large lecture halls, auditoriums,
	lobbies or other areas where large numbers of people congregate.
	Heavy masonry or stone veneer above exit ways.
	Unbraced masonry parapets, cornices or other ornamentation above exit ways.
	Unrestrained hazardous materials storage.
	Masonry chimneys.
	Unrestrained natural gas-fueled equipment such as water heaters, boilers,
	emergency generators, etc.
$\times$	None of the above.

## **BRIEF DESCRIPTION OF ANTICIPATED FAILURE MECHANISM**

## **COMMENTS AND RECOMMENDATIONS**

A FEMA 154 Level 2 Rapid Visual Screening was performed in lieu of an ASCE Tier 1 evaluation due to construction type and lack of as-built documentation. Lack of anchorage in the slab below is the most significant deficiency resulting in the assigned rating.

## **Appendices**

A. FEMA 154 Rapid Visual Screening



ba-		1	
		1	
		P400	
	18 300		

**SKETCH** 

	VERT THOM Seismicity
Address: 100 De Neve	Dr
Los Angeles,	<u>CA</u> zip: <u>90024</u>
Other Identifiers: 4303.4	
	Stadium - Outfield Storage
Use: Utility	
Latitude: 34.0763967	Longitude: -118.4533646
S <sub>S</sub> : 2.020	s₁: 0.723 Date/Time: 3/25/21, 11am
Screener(s):	
	1 Below Grade: Year Built: N/A □ EST Code Year: N/A
	OO Code Year: N/A s, Year(s) Built:
	mercial Emer. Services
Industrial Office	<del>-</del>
Utility Ware	ehouse Residential, # Units:
	□C □D □E □F DNK
3	Dense Stiff Soft Poor If DNK, assume Type D. Soil Soil Soil Soil
Geologic Hazards: Liquefaction:	Yes/No/DNK Landslide: Yes/No/DNK Surf. Rupt.: Yes No/DNK
Adjacency: Doundir	ng Falling Hazards from Taller Adjacent Building
Irregularities:	(type/severity) None
☐ Plan (ty	pe) None
_	ed Chimneys Heavy Cladding or Heavy Veneer
Hazards:	ts Appendages
COMMENTS:	
Roth the exterior of	and the interior of the
	inspected. The unit is
not anchored to sl	•
	au Delow.
1	
-	
-	
☐ Additional sketches or commen	ts on separate page
S, AND FINAL LEVEL 1 SC	ORE, S <sub>L1</sub>

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, $S_{L1}$																		
FEMA BUILDING TYPE	Do Not Know	W1	W1A	W2	S1 (MRF)	<b>S2</b> (BR)	<b>S3</b> (LM)	<b>S4</b> (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		2.1	1.9	1.8	1.5	1.4	1.6	1.4	1.2	1.0	1.2	0.9	1.1	1.0	1.1	1.1	0.9	1.1
Severe Vertical Irregularity, V <sub>L1</sub>		-0.9	-0.9	-0.9	-0.8	-0.7	-0.8	-0.7	-0.7	-0.7	-0.8	-0.6	-0.7	-0.7	-0.7	-0.7	-0.6	NA
Moderate Vertical Irregularity, V <sub>L1</sub>		-0.6	-0.5	-0.5	-0.4	-0.4	-0.5	-0.4	-0.3	-0.4	-0.4	-0.3	-0.4	-0.4	-0.4	-0.4	-0.3	NA
Plan Irregularity, P <sub>L1</sub>		-0.7	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.4	-0.4	-0.5	-0.3	-0.5	-0.4	-0.4	-0.4	-0.3	NA
Pre-Code		-0.3	-0.3	-0.3	-0.3	-0.2	-0.3	-0.2	-0.1	-0.1	-0.2	0.0	-0.2	-0.1	-0.2	-0.2	0.0	0.0
Post-Benchmark		1.9	1.9	2.0	1.0	1.1	1.1	1.5	NA	1.4	1.7	NA	1.5	1.7	1.6	1.6	NA	0.5
Soil Type A or B		0.5	0.5	0.4	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.1	0.3	0.2	0.3	0.3	0.1	0.1
Soil Type E (1-3 stories)		0.0	-0.2	-0.4	-0.3	-0.2	-0.2	-0.2	-0.1	-0.1	-0.2	0.0	-0.2	-0.1	-0.2	-0.2	0.0	-0.1
Soil Type E (> 3 stories)		-0.4	-0.4	-0.4	-0.3	-0.3	NA	-0.3	-0.1	-0.1	-0.3	-0.1	NA	-0.1	-0.2	-0.2	0.0	NA
Minimum Score, S <sub>MIN</sub>		0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \ge S_{MIN}$ :		1.1
EXTENT OF REVIEW	OTHER HAZARDS	ACTION REQUIRED
Exterior:	Are There Hazards That Trigger A Detailed Structural Evaluation?  ☐ Pounding potential (unless S <sub>L2</sub> > cut-off, if known) ☐ Falling hazards from taller adjacent building ☐ Geologic hazards or Soil Type F	Detailed Structural Evaluation Required?  ☐ Yes, unknown FEMA building type or other building ☐ Yes, score less than cut-off ☐ Yes, other hazards present ☐ No  Detailed Nonstructural Evaluation Recommended? (check one)
LEVEL 2 SCREENING PERFORMED?  ✓ Yes, Final Level 2 Score, S <sub>L2</sub> 1.1 No Nonstructural hazards?	Significant damage/deterioration to the structural system	☐ Yes, nonstructural hazards identified that should be evaluated     ☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary     ☐ No, no nonstructural hazards identified    ☐ DNK
Where information cannot be verified, sc	reener shall note the following: EST = Esti	mated or unreliable data <u>OR</u> DNK = Do Not Know

## Rapid Visual Screening of Buildings for Potential Seismic Hazards

# Level 2 (Optional)

FEMA P-154 Data Collection Form

Optional Level 2 data collection to be performed by a civil or structural engineering professional, architect, or graduate student with background in seismic evaluation or design of buildings.

Bldg Name: Outfield Storage	Final Level 1 Score:	$S_{L1} = 0$	(do not consider S <sub>MIN</sub> )
Screener:	Level 1 Irregularity Modifiers:	Vertical Irregularity, $V_{L1} = 0$	Plan Irregularity, $P_{L1} = 0$
Date/Time:	ADJUSTED BASELINE SCORE:	$S' = (S_{L1} - V_{L1} - P_{L1}) = 1.1$	

STRUCTURA	L MODIFIER	RS TO ADD TO ADJUSTED BASELINE SCORE					
Topic	Statement (/	f statement is true, circle the "Yes" modifier; otherwise cross out the modifier.)	Yes	Subtotals			
Vertical	Sloping	W1 building: There is at least a full story grade change from one side of the building to the other.	-0.9/				
Irregularity, $V_{L2}$	Site	Non-W1 building: There is at least a full story grade change from one side of the building to the other.	-0/2				
	Weak	W1 building cripple wall: An unbraced cripple wall is visible in the crawl space.	-0.5				
	and/or	W1 house over garage: Underneath an occupied story, there is a garage opening without a steel moment frame,	/				
	Soft Story	and there is less than 8' of wall on the same line (for multiple occupied floors above, use 16' of wall minimum).	-0.9/				
	(circle one maximum)	W1A building open front: There are openings at the ground story (such as for parking) over at least 50% of the length of the building.	-0/9				
	ŕ	Non-W1 building: Length of lateral system at any story is less than 50% of that at story above or height of any	1				
		story is more than 2.0 times the height of the story above.	<b>/</b> 0.7				
		Non-W1 building: Length of lateral system at any story is between 50% and 75% of that at story above or height	/				
		of any story is between 1.3 and 2.0 times the height of the story above.	/ -0.4				
	Setback	Vertical elements of the lateral system at an upper story are outboard of those at the story below causing the	[ <i>[</i>				
		diaphragm to cantilever at the offset.	-0.7				
		Vertical elements of the lateral system at upper stories are inboard of those at lower stories.	-0.4				
		There is an in-plane offset of the lateral elements that is greater than the length of the elements.	-0.2				
	Short	C1,C2,C3,PC1,PC2,RM1,RM2: At least 20% of columns (or piers) along a column line in the lateral system have					
	Column/	height/depth ratios less than 50% of the nominal height/depth ratio at that level.	-0.4				
	Pier	C1,C2,C3,PC1,PC2,RM1,RM2: The column depth (or pier width) is less than one half of the depth of the spandrel,	1 1/4				
	Calit Laval	or there are infill walls or adjacent floors that shorten the column.  There is a split level at one of the floor levels or at the roof.	-0 <b>/</b> 4 - <b>0</b> /.4				
	Split Level Other	There is a split level at one of the floor levels of at the root.  There is another observable severe vertical irregularity that obviously affects the building's seismic performance.	- <b>y</b> .4 - <b>p</b> .7	$V_{L2} = 0$			
	Irregularity	There is another observable moderate vertical irregularity that may affect the building's seismic performance.	-p.7 -10.4	$V_{L2} = \underline{\hspace{1cm}}$ (Cap at -0.9)			
Plan	,	gularity: Lateral system does not appear relatively well distributed in plan in either or both directions. (Do not	70.4	(Cup ut -0.9)			
Irregularity, P <sub>L2</sub>		1/1A open front irregularity listed above.)	-0.8				
		system: There are one or more major vertical elements of the lateral system that are not orthogonal to each other.	<b>-0.2</b>				
		<b>/</b> -0.2					
	Reentrant corner: Both projections from an interior corner exceed 25% of the overall plan dimension in that direction.  J-0.2  Diaphragm opening: There is an opening in the diaphragm with a width over 50% of the total diaphragm width at that level.  -0.2						
		ng out-of-plane offset: The exterior beams do not align with the columns in plan.	-9/2	$P_{L2} = 0$			
	Other irregula	arity: There is another observable plan irregularity that obviously affects the building's seismic performance.	-0.5	(Cap at -0.7)			
Redundancy	The building	has at least two bays of lateral elements on each side of the building in each direction.	+0.2				
Pounding		parated from an adjacent structure  The floors do not align vertically within 2 feet.  (Cap total	-0.7				
		1.5% of the height of the shorter of One building is 2 or more stories taller than the other. pounding	-0.7				
		and adjacent structure and:  The building is at the end of the block.  modifiers at -0.9)	-0.4				
S2 Building		eometry is visible.	-0.7				
C1 Building		ves as the beam in the moment frame.	-0.3				
PC1/RM1 Bldg		of-to-wall ties that are visible or known from drawings that do not rely on cross-grain bending. (Do not combine with ark or retrofit modifier.)	10.2				
PC1/RM1 Bldg		has closely spaced, full height interior walls (rather than an interior space with few walls such as in a warehouse).	+0.2				
URM	Gable walls a		J-0.3				
MH		pplemental seismic bracing system provided between the carriage and the ground.	+0.5	0			
Retrofit		ive seismic retrofit is visible or known from drawings.	+1.2	<sub>M=</sub> 0			
		<u> </u>		to Level 1 form)			
		deterioration or another condition that negatively affects the building's seismic performance:  Yes  No	TTATISTEL	to Level I TOITII)			
		he comment box below and indicate on the Level 1 form that detailed evaluation is required independent of the buildin	a's score				
,00, 00001100 111	o condition in t	The comment sent select and indicate on the Level 1 form that actained evaluation to regained independent of the building	9 3 00010.				

OBSERVABLE NONSTRUCTURAL HAZARDS							
Location	Statement (Check "Yes" or "No")	Yes	No	Comment			
Exterior	There is an unbraced unreinforced masonry parapet or unbraced unreinforced masonry chimney.		- /				
	There is heavy cladding or heavy veneer.						
	There is a heavy canopy over exit doors or pedestrian walkways that appears inadequately supported.						
	There is an unreinforced masonry appendage over exit doors or pedestrian walkways.						
	There is a sign posted on the building that indicates hazardous materials are present.		- /				
	There is a taller adjacent building with an unanchored URM wall or unbraced URM parapet or chimney.						
	Other observed exterior nonstructural falling hazard:		1				
Interior	There are hollow clay tile or brick partitions at any stair or exit corridor.		/				
	Other observed interior nonstructural falling hazard:		/				
Estimated Nonstructural Seismic Performance (Check appropriate box and transfer to Level 1 form conclusions)							
	☐ Potential nonstructural hazards with significant threat to occupant life safety →Detailed Nonstructural Evaluation recommended						
	☐ Nonstructural hazards identified with significant threat to occupant life safety → But no Detailed Nonstructural Evaluation required						
	✓ Low or no nonstructural hazard threat to occupant life safety → No Detailed Nonstructural Evaluation required						

Comments:		