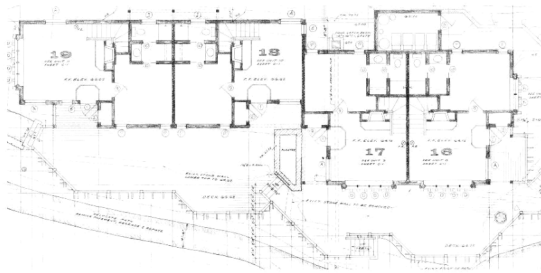




BUILDING REPORT REQUIREMENTS
ASCE 41-17 TIER 1 SEISMIC EVALUATIONS

BUILDING REPORT

- 1) UC Campus: Los Angeles
2) Building Name: Lake Arrowhead Oak
3) Building CAAN ID: 42010
4) Auxiliary Building ID:
5) Date of Evaluation: 6/30/2020
6) Evaluation by: Englekirk, TAS
7) Seismic Performance Rating and Basis of Rating: IV, ASCE 41-17 Tier 1



8) Plan Image or Aerial Photo



9) Exterior Elevation Photo

- 10) Site Location
(a) Latitude Decimal Coordinates: 34.265749
(b) Longitude Decimal Coordinates: -117.187219
11) ASCE 41-17 Model Building Type and Description
(a) Longitudinal Direction: W1 and W2: Wood frame, wood shear panels
(b) Transverse Direction: W1 and W2: Wood frame, wood shear panels
12) Number of Stories
(a) Above grade: 2
(b) Below grade: 0
13) Original Building Design Code & Year: UBC-1991
14) Retrofit Building Design Code & Year (if applicable):
15) Cost Range to Retrofit (if applicable): (Low, Medium, High or Very High):



Comments: Shown on drawings dated 1995. Assumed to be replacement for original Oak with 1921 construction date. No CGS maps for north shore of Lake Arrowhead. Except for sloping site which is addressed in the design, building qualifies for presumptive rating of III. Rating lowered one value for deck bracing configuration. If 1921 date of construction is correct, rating would be V or worse.



**BACKGROUND INFORMATION**

**Site Information**

16) Site Class (A – F) and Basis of Assessment

- (a) Site Class: **D**
- (b) Site Class Basis: **Unknown (Default)**
- (c) Site Class Company: **None**
- (d) Site Class Report Date: **None**
- (e) Site Class Ref Page No.: **None**

17) Geologic Hazards

- (a) Fault Rupture (Yes, No or Unknown) and Basis of Assessment: **Unknown, None**
- (b) Liquefaction (Yes, No or Unknown) and Basis of Assessment: **Unknown, None**
- (c) Landslide (Yes, No or Unknown) and Basis of Assessment: **Unknown, None**

18) Site-specific Ground Motion Study? (Yes or No) **No**

Seismic design acceleration parameters of interest:	
For BSE-1N	<b>1.249</b> and <b>0.805</b>
For BSE-1E	<b>0.919</b> and <b>0.545</b>

19) Estimated Fundamental Period (seconds)

- (a) Longitudinal: **0.19**
- (b) Transverse: **0.19**

20) Falling Hazards Assessment Summary: **None noted. Tall chimneys braced with plywood and tied to adjacent roof.**

21) Structural Non-Compliances/Findings Significantly Affecting Rating Determination Summary  
Significant Structural Deficiencies, Potentially Affecting *Seismic Performance Rating* Designation:

- (a) Lateral System Stress Check (wall shear, column shear or flexure, or brace axial as applicable):  
**No deficiency noted**
- (b) Load Path: **No deficiency noted**
- (c) Adjacent Buildings: **No deficiency noted**
- (d) Weak Story: **No deficiency noted**
- (e) Soft Story: **No deficiency noted**
- (f) Geometry (vertical irregularities): **No deficiency noted**
- (g) Torsion: **Not Applicable**
- (h) Mass – Vertical Irregularity: **No deficiency noted**
- (i) Cripple Walls: **No deficiency noted**
- (j) Wood Sills (bolting): **No deficiency noted**
- (k) Diaphragm Continuity: **No deficiency noted**
- (l) Openings at Shear Walls (concrete or masonry): **Not Applicable**
- (m) Liquefaction: **Unknown**



- (n) Slope Failure: [Unknown](#)
- (o) Surface Fault Rupture: [Unknown](#)
- (p) Masonry or Concrete Wall Anchorage at Flexible Diaphragm: [Not Applicable](#)
- (q) URM wall height to thickness ratio: [Not Applicable](#)
- (r) URM Parapets or Cornices: [Not Applicable](#)
- (s) URM Chimney: [Not Applicable](#)
- (t) Heavy Partitions Braced by Ceilings: [No deficiency noted](#)
- (u) Appendages: [No deficiency noted](#)

22) Brief Description of Anticipated Failure Mechanism

Except for slope condition, building qualifies for presumptive rating of III based on applicable building code. Perimeter foundation walls minimize impact of slope. Failure of shear wall panels and nailing, hold-downs and/or compression posts. Excessive deck lateral drift.

23) Seismic Retrofit Concept Sketches/Description (only required for buildings rated V or worse)

[None recommended.](#)

**Building Report Appendices**

A) ASCE 41-17 Tier 1 Checklists ([Structural](#) only)

B) Quick Check Calculations