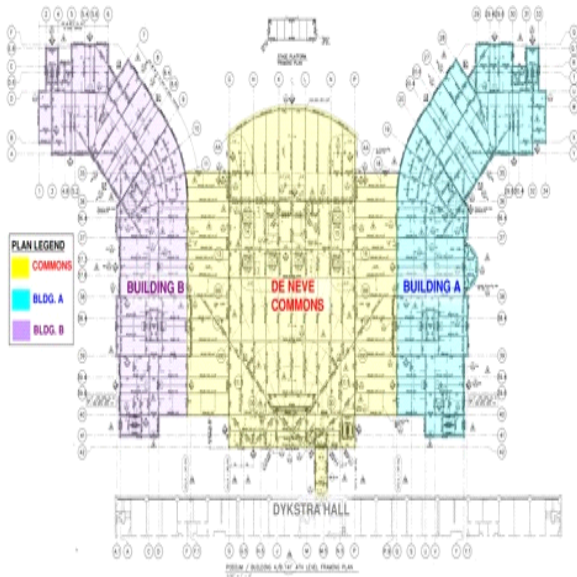




BUILDING REPORT REQUIREMENTS
ASCE 41-17 TIER 1 SEISMIC EVALUATIONS

BUILDING REPORT

- 1) UC Campus: Los Angeles
2) Building Name: De Neve Building B
3) Building CAAN ID: 4273
4) Auxiliary Building ID:
5) Date of Evaluation: 11/10/2020
6) Evaluation by: Englekirk, TAS / NAT
7) Seismic Performance Rating and Basis of Rating: V, ASCE 41-17 Tier 1



8) Plan Image or Aerial Photo



9) Exterior Elevation Photo

- 10) Site Location
(a) Latitude Decimal Coordinates: 34.070331
(b) Longitude Decimal Coordinates: -118.450134
11) ASCE 41-17 Model Building Type and Description
(a) Longitudinal Direction: S2 and S2a: Steel concentrically braced frame
(b) Transverse Direction: S2 and S2a: Steel concentrically braced frame
12) Number of Stories
(a) Above grade: 6
(b) Below grade: 0
13) Original Building Design Code & Year: CBC-1995
14) Retrofit Building Design Code & Year (if applicable): -
15) Cost Range to Retrofit (if applicable): (Low, Medium, High or Very High): Medium



Comments: Although separate CAAN are provided for the Commons, Building A and Building B, they are one structure. Separate, but identical, reports have been prepared for each building.

The building lateral system in each orthogonal direction consists of steel braced frames above the 2nd Floor (with X-bracing or chevron bracing configurations) and reinforced concrete shear walls below the 2nd Floor.



**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: **No, CGS Maps**
- (b) Liquefaction (Yes, No or Unknown) and Basis of Assessment: **No, CGS Maps**
- (c) Landslide (Yes, No or Unknown) and Basis of Assessment: **No, CGS Maps**

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

Seismic design acceleration parameters of interest:	
For BSE-1N	<b>1.62 and 0.822</b>
For BSE-1E	<b>0.896 and 0.516</b>

19) Estimated Fundamental Period (seconds)

- (a) Longitudinal: **0.78**
- (b) Transverse: **0.78**

20) Falling Hazards Assessment Summary: **None noted.**

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):  
**Yes, column axial stress deficiency noted.**
- (b) Load Path: **No deficiency noted**
- (c) Adjacent Buildings: **Unknown. The available drawings do not show the information required to check the existing seismic gap provided between DeNeve Commons and Dykstra Hall to the south. This building separation can be verified in field to check whether it exceeds the limit of 13.86" per the Tier 1 checklist.**
- (d) Weak Story: **No deficiency noted**
- (e) Soft Story: **No deficiency noted**
- (f) Geometry (vertical irregularities): **No deficiency noted**
- (g) Torsion: **No deficiency noted**
- (h) Mass – Vertical Irregularity: **No deficiency noted**
- (i) Cripple Walls: **Not Applicable**
- (j) Wood Sills (bolting): **Not Applicable**



- (k) Diaphragm Continuity: No deficiency noted
- (l) Openings at Shear Walls (concrete or masonry): Yes, deficiency noted. However, adequate drag/shear transfer seems to be provided on one side of the wall/braced frame.
- (m) Liquefaction: No
- (n) Slope Failure: No
- (o) Surface Fault Rupture: No
- (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

Column failure may occur following a strong seismic event as well as other possible failure mechanisms for braced frames including, buckling and fracture of braces, gusset plate connection failure, column base plate fracture, and/or beam failure.

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

Strengthening of columns. Depending on the pervasiveness of the deficiencies, it may be more cost-effective to reduce the demand on the existing structure via means of added damping or other added lateral force resisting elements.

### **Building Report Appendices**

- A) ASCE 41-17 Tier 1 Checklists (Structural only)
- B) Quick Check Calculations