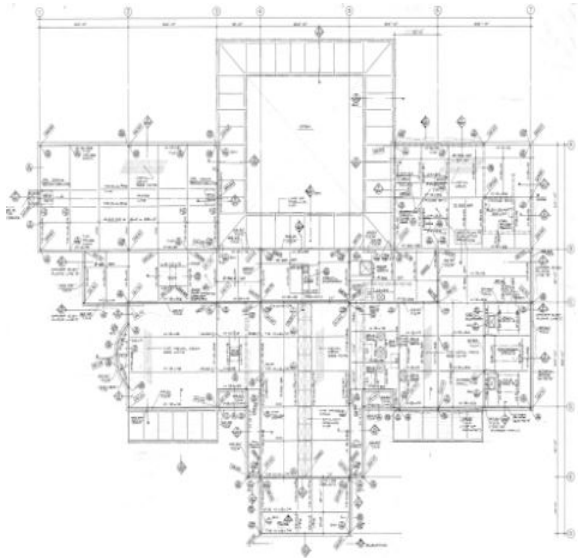




BUILDING REPORT REQUIREMENTS
ASCE 41-17 TIER 1 SEISMIC EVALUATIONS

BUILDING REPORT

- 1) UC Campus: Los Angeles
2) Building Name: LuValle Commons
3) Building CAAN ID: 4423
4) Auxiliary Building ID:
5) Date of Evaluation: 10/13/2020
6) Evaluation by: Englekirk, AB
7) Seismic Performance Rating and Basis of Rating: V, ASCE 41-17 Tier 1

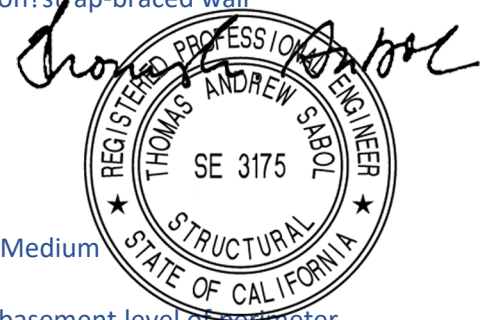


8) Plan Image or Aerial Photo



9) Exterior Elevation Photo

- 10) Site Location
(a) Latitude Decimal Coordinates: 34.0736327
(b) Longitude Decimal Coordinates: -118.4392524
11) ASCE 41-17 Model Building Type and Description
(a) Longitudinal Direction: CFS2: Cold-formed steel light-frame construction?strap-braced wall system
(b) Transverse Direction: CFS2: Cold-formed steel light-frame construction?strap-braced wall system
12) Number of Stories
(a) Above grade: 1
(b) Below grade: 1
13) Original Building Design Code & Year: UBC-1979
14) Retrofit Building Design Code & Year (if applicable):
15) Cost Range to Retrofit (if applicable): (Low, Medium, High or Very High): Medium



Comments: 1 story level of metal stud wall with steel strap bracing above 1 basement level of perimeter CMU Walls. Exposure of representative connection of the Metal Stud Lateral System are required in the future due to absence of detailing information on the structural drawings.



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	1.638 and 0.83
For BSE-1E	0.898 and 0.518

19) Estimated Fundamental Period (seconds)

- (a) Longitudinal: **0.129**
- (b) Transverse: **0.129**

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, brace axial 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: **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): **Not Applicable**
- (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

Inadequate axial capacity of strap-braced steel elements and connections resulting in excessive drifts cause large rotation at steel beam/column shear connections leading to failure.

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

Addition of new strap-braced elements or metal sheathing in the back side of the existing lateral metal stud walls to increase the strength of the overall system.

Building Report Appendices

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

- B) Quick Check Calculations