Campus: UCSF Building Name: Aldea San Miguel 14 CAAN ID: 3019 Auxiliary Building ID: NA



UNIVERSITY OF CALIFORNIA

Date: 8/21/2019

### FORM 1 CERTIFICATE OF SEISMIC PERFORMANCE LEVEL UC-Designed & Constructed Facility Campus-Acquired or Leased Facility

**BUILDING DATA** 

Building Name: Aldea San Miguel 14 Address: 80 Behr Ave, San Francisco Site location coordinates: Latitude 37.7585 Longitudinal -122.4546

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

ASCE 41-17 Model Building Type:

- a. Longitudinal Direction: W1: Wood Frame with Wood Shear Panels
- b. Transverse Direction: W1: Wood Frame with Wood Shear Panels

Gross Square Footage: 11,592 Number of stories *above* grade: 3 Number of basement stories *below* grade: 0

Year Original Building was Constructed: 1999 Original Building Design Code & Year: CBC - 1995 Retrofit Building Design Code & Code (if applicable): NA

#### SITE INFORMATION

Site Class: CBasis: (NA, June 2019, Pg. 1-3)Geologic Hazards:Fault Rupture: NoLiquefaction: NoLandslide: NoBasis: UCSF Presumptive Buildings – Geotechnical Assessment, Egan (2019)Basis: UCSF Presumptive Buildings – Geotechnical Assessment, Egan (2019)Basis: UCSF Presumptive Buildings – Geotechnical Assessment, Egan (2019)Basis: UCSF Presumptive Buildings – Geotechnical Assessment, Egan (2019)

#### ATTACHMENT

Original Structural Drawings: (Aldea Housing, Nishkian & Assoc. Inc, 7/25/97, S0.1) or Seismic Evaluation: NA Retrofit Structural Drawings: NA



#### **CERTIFICATION & PRESUMPTIVE RATING VERIFICATION STATEMENT**

I, Maryann T. Phipps, 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):

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- 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
- b) visiting the building to verify the observable existing conditions are reasonably consistent with those shown on the structural drawings: ☑ Yes □ No

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):

☑ 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.

 $\square$  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 comprehensive<sup>1</sup> building seismic retrofit design was fullyconstructed with an engineered design based on the 1997 UBC/1998 *or later* 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 *or later* 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 *or later* 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.

<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.

Campus: UCSF Building Name: Aldea San Miguel 14 CAAN ID: 3019 Auxiliary Building ID: NA



Date: 8/21/2019

#### **CERTIFICATION SIGNATURE**

Maryann T. Phipps Print Name President

Title

S2995

CA Professional Registration No.

arlann V Signature

6/30/2020 License Expiration Date

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OF

8/21/2019

Date

OFF vo. 2995 EXP. 6/30/20

OF CA

9/4/2019

AFFIX SEAL HERE

Estructure, (510) 235-3116, 1144 65th St Suite A, Oakland Firm Name, Phone Number, and Address



## UNIVERSITY OF CALIFORNIA

#### 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><i>g</i></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><i>h</i></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>a</sup> Building type refers to one of the common building types defined in Table 3-1 of ASCE 41-17.

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

<sup>c</sup> not used

<sup>d</sup> not used

e not used

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

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

<sup>h</sup> Cold-formed steel shear walls with wood structural panels only.

<sup>i</sup> Flat slab concrete moment frames shall not be considered Benchmark Buildings.

rawings and written material appearing herein ititute original and unpublished work of the t/Engineer and may not be duplicated, used or d without written consent of Architect/Engineer.

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ARCH. BLDG. BLK BLKG. B.N. BOT BRG. B.S. BTWN. CTR.J. OR C.J. CTL.J. CMU COL. CONC. CONN. CONST. CONT. C.I.P. DET DIM. DWG. DWR'G EXIST. OR (E) E.S. E.W.E.F. E.W. FIN.FL F.O.CO. F.S. FTG. F.W. F.N. F.P. GALV. G.L. HORIZ H.S.B. J.H. L.L.V. L.L.H. MAX. M.B. MECH. MIN. MISC. N.I.C. NS N.T.S. NEW OR (N) 0.D 0.H. OPNG. P.D.F. P.T. REINF. RWD. S.A.D. S.M.D. S.D.S. SECT. SIM SPECS. STD STGD. STIFF. SYMM. T.O.PL T&B THD. T.N. T.O.C. TYP T.O.S. T.O.W. U.O.N. VFR V.I.F. W.P

ANCHOR BOLT ARCHITECTURAL BOARD BUILDING BLOCK BLOCKING BOUNDARY NAILING BOTTOM BEARING BOTH SIDES BETWEEN CONSTRUCTION JOINT

ABBREVIATION:

A.B.

CONTROL JOINT CONCRETE MASONRY UNIT COLUMN CONCRETE CONNECTION CONSTRUCTION CONTINUOUS COMPLETE PENETRATION CAST IN PLACE

DETAIL DIAMETER DIMENSION DOUBLE JOIST DRAWING DITTO

EACH FACE ELEVATION EDGE NAILING EXISTING EACH SIDE EACH WAY, EACH FACE EXTERIOR EACH WAY

FINISH FLOOR FACE OF CONCRETE FAR SIDE FOOTING FILLET WELD FIELD NAILING

FULL PENETRATION

GAUGE GALVANIZED GRID LINE GLUED LAMINATED BEAM

HORIZONTAL HIGH STRENGTH BOLTS INSIDE DIAMETER

INTERIOR JOIST HANGER LONG LEG VERTICAL

LONG LEG HORIZONTAL MAXIMUM MACHINE BOLT MECHANICAL

MINIMUM MISCELLANEOUS NOT IN CONTRACT NUMBER NEAR SIDE NOT TO SCALE

ON CENTER OUTSIDE DIAMETER OPPOSITE HAND OPENING

NEW

POWER DRIVEN FASTENERS PLATE PLYWOOD PARTIAL PENETRATION

PRESSURE TREATED REINFORCED, REINFORCING, REINFORCEMENT

REDWOOD SEE ARCHITECTURAL DRAWING SEF

MECHANICAL DRAWING SELF-DRILLING SCREW SECTION SIMILAR

SQUARE SPECIFICATIONS STANDARD STAGGERED STIFFENER

SYMMETRICAL TOP OF PLATE TOP AND BOTTOM THREADED

TOE NAIL

TOP OF CONCRETE TYPICAL TOP OF STEEL TOP OF WALL

UNLESS OTHERWISE NOTED VERTICAL

VERIFY IN FIELD WORK POINT WELDED STUD

W.S.

MANUFACTURED TRUSSES:

- 1. MATERIALS, DESIGN, FABRICATION AND EREC CONFORM TO DESIGN SPECIFICATIONS FOR I PLATE CONNECTED WOOD TRUSSES (TPI), L/ THE 1995 CALIFORNIA BUILDING CODE, AND LOCAL CODES.
- DESIGN LOADS: AS SHOWN ON SHEET S5.2
   A COMPLETE SHOP DRAWING SUBMITTAL SHATO THE ARCHITECT PRIOR TO FABRICATION. NOT OCCUR UNTIL SHOP DRAWINGS HAVE B APPROVED. SUBMITTAL SHALL INCLUDE:
- A. COMPLETE LAYOUT PLANS SHOWING I LOCATIONS OF ALL TRUSSES AND SH BRIDGING, BRACING AND BLOCKING.
- B. COMPLETE SET OF DETAILS SHOWING BEARING CONDITION.
- SPECIAL INDICATION ON THE LAYOUT AND BLOCKING TO BE USED FOR SHE STRUCTURAL DRAWINGS.
   COMPLETE SET OF CALCULATIONS FOR
- INCLUDING DEFINITIONS OF ABBREVIAT MATERIAL SHALL BE SIGNED BY A PR LICENSED IN THE STATE OF CALIFORN CONSIST OF TWO SETS OF BLUELINE OF SEPIA REPRODUCIBLE PRINTS. SEF QUALITY PRINTS WITH ALL LINES CLEA LITTLE OR NO BACKROUND.

4. SUBMIT DESIGN AND PLANS TO UCSF-FACIL CODE REVIEW & INSPECTION DEPARTMENT / PRIOR TO ERECTION.

STRUCTURAL STEEL:

- STEEL USAGE:
   A. ALL ROLLED SHAPES AND PLATES, ASTM B. TUBE: ASTM A500, GRADE B.
   C. BOLTS: ASTM A307 (M.B.)
   D. SHEAR CONNECTORS: ASTM A108
   E. ANCHOR BOLTS: ASTM A307 (A.B)
   F. THREADED RODS: ASTM A36
- 2. ALL STRUCTURAL STEEL TO BE DETAILED, FAE ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.
- ALL WELDING TO CONFORM TO A.W.S. AND TO CERTIFIED WELDERS.
   ALL BUTT WELDS ARE TO BE COMPLETE PENI
- WELDS TO BE A.I.S.C. MINIMUM SIZES BASEI JOINED, U.O.N. 5. WELDING ELECTRODE - E70XX, U.O.N.
- 6. BOLT HOLES FOR MACHINE BOLTS SHALL BE OVERSIZE, U.O.N. WHERE OVERSIZED HOLE 5/16"X3"X3" PLATE WASHER WELDED TO THE
- ALL STEEL MEMBERS CONNECTING TO OR SUF SHALL HAVE 1/2" DIAMETER THREADED STUDS U.O.N.
   CONTRACTORS SHALL SUBJECT STATE
- 8. CONTRACTORS SHALL SUBMIT DETAILED SHOP SPECIFICATIONS FOR ALL STEEL TO THE ARCH TO FABRICATION.
- ALL STEEL EXPOSED TO WEATHER SHALL BE
   ALL DETAILS ARE TYPICAL. FOR CONDITIONS CONTRACTOR SHALL APPLY SIMILAR CONCEPT CONDITIONS AND SUBMIT FOR REVIEW AND A ASSOCIATES AND TO RECORD AND BUILDING SAN FRANCISCO.

CONCRETE UNIT MASONRY (CMU):

- . CONCRETE BLOCK SHALL BE HOLLOW, LOAD-B MASONRY UNITS CONFORMING TO ASTM C90, BE TYPE S. GROUT SHALL FOLLOW CONCRET FOR SLUMP REQUIREMENT.
- REQUIRED DESIGN STRENGTH f'm = 1500 PSI; MASONRY UNITS, AND GROUT WITH A MINIMUM 2000 PSI (N&A - SEE UBC TABLE 24c.) AND PER UBC REQUIREMENTS. AT CONTRACTOR'S ESTABLISHED BY PRISM TEST PER UBC SECTION
   USE OPEN END UNITS, BOND BEAM UNITS AT UNITS SHALL DE DIAGED IN DIMENSION SECTION.
- UNITS SHALL BE PLACED IN RUNNING BOND NOTED. REINFORCING BARS IN MASONRY SHALL CONFO OF ASTM A615, GRADE 60. LAP SPLICES IN
- OF ASTM A615, GRADE 60. LAP SPLICES IN SHALL BE 40 DIAMETERS OR 2'-0" MINIMUM NOTED ON PLAN. VERTICAL REINFORCING TO UNLESS OTHERWISE NOTED ON PLANS. 5. LOW LIFT CONSTRUCTION, MAXIMUM GROUT POU
- ALL CELLS IN CONCRETE BLOCKS SHALL BE FI EXCEPT AS NOTED IN THE DRAWINGS OR SPEC
- 7. CELLS SHALL BE IN VERTICAL ALIGNMENT. DO ALIGN WITH CORES CONTAINING REINFORCING
- 8. ALL ISOLATED BOLTS EMBEDDED IN MASONRY IN PLACE WITH NOT LESS THAN 2" OF GROUT
- 9. REFER TO ARCHITECTURAL DRAWINGS FOR SUR UNITS, LAYING PATTERN AND JOINT TYPE.
- 10. CONTINUOUS SPECIAL INSPECTION AND TESTING MASONRY WORK (WHERE APPLICABLE).

	CARPENTRY:	REINFORCING STEEL:
CTION SHALL LIGHT METAL ATEST EDITION, ANY APPLICABLE	<ol> <li>ALL LUMBER SHALL BE NO. 2 DOUGLAS FIR-LARCH (WCLIP OR WWPA) EXCEPT:         <ul> <li>A. INTERIOR STUDS: STANDARD OR BETTER.</li> <li>B. BEAMS, POSTS AND STRINGERS: NO. 1 DOUGLAS FIR-LARCH,</li> </ul> </li> </ol>	1. ALL REINFORCIN "BUILDING CODE LATEST APPROVI MODIFIED BY TH
	UNLESS NOTED OTHERWISE ON PLANS. MAXIMUM MOISTURE CONTENT SHALL BE 19 PERCENT.	2. REINFORCING ST GRADE 40 FOR
IALL BE MADE FABRICATION SHALL BEEN RETURNED	2. GLUE-LAMINATED TIMBER BEAMS: A. CONFORM TO U.S. VOLUNTARY PRODUCT STANDARD PS 56-73. B. LUMBER: EXTERIOR AND EXPOSED TO VIEW: ALASKAN YELLOW CEDAR	OTHERWISE NOT BETWEEN PARAL
DIMENSIONED IOWING ALL REQUIRED	Fb = 2400 PSI $Fv = 165 PSI$ $E = 1800 KSI$ OTHER: DOUGLAS FIR-LARCH AITC COMBINATION 24F-V4,	4. ALL REINFORCIN PLACE PRIOR TO TO ALLOW WALK MATERIAL SHALL
EACH DIFFERENT	Fb = 2400 PSI Fv = 165 PSI E = 1800 KSI	5. WELDING OF RE STRUCTURAL EN
PLANS OF ALL TRUSSES IEAR TRANSFER AS PER	AT CONT. AND CANTILEVER CONDITIONS, PROVIDE MEMBERS W/ ALLOW. STRESS PROPERTIES EQUAL TO AITC COMBINATION 24F-V8.	
R ALL TRUSS TYPES FIONS USED. SUBMITTAL ROFESSIONAL ENGINEER NIA. SUBMITTAL SHALL PRINTS AND ONE SET PIAS SHALL BE HIGH ARLY READABLE AND	<ul> <li>C. ADHESIVE: WET CONDITION OF SERVICE.</li> <li>D. APPEARANCE: INDUSTRIAL GRADE, EXCEPT ARCH. APPEARANCE GRADE WHERE EXPOSED TO VIEW.</li> <li>E. PROTECTION: SEAL ENDS AND BUNDLE WRAP.</li> <li>F. PROVIDE AITC QUALITY MARK ON EACH MEMBER AND CERTIFICATE OF CONFORMANCE WITH ANSI/AITC A190.1.1983.</li> <li>G. GLU-LAMINATED TIMBER BEAMS TO BE PROVIDED W/ NO CAMBERS, TYP., U.O.N.</li> </ul>	
ARLY READABLE AND	3. ALL LUMBER IN CONTACT WITH CONCRETE, MASONRY OR EXPOSED TO WEATHER SHALL BE PRESERVATIVE PRESSURE TREATED, U.O.N.	AGAINST EARTH; 2" WHEN EXPOS WALLS AND SLA
LITIES MANAGEMENT AT LEAST 4 WEEKS	<ul> <li>TYP., U.O.N.</li> <li>3. ALL LUMBER IN CONTACT WITH CONCRETE, MASONRY OR EXPOSED TO WEATHER SHALL BE PRESERVATIVE PRESSURE TREATED, U.O.N.</li> <li>4. ALL JOIST HANGERS AND FRAMING HARDWARE SHALL BE SIMPSON "STRONG-TIE" OR APPROVED EQUAL. WHERE CONNECTION IS NOT DETAILED, PROVIDE APPROPRIATE CONNECTOR PER MANUFACTURER'S RECOMMENDATION.</li> </ul>	
1 A36 OR ASTM A572, GR.50	5. BOLTS FASTENING WOOD MEMBERS SHALL BE FITTED WITH STANDARD CUT WASHER AGAINST NUT AND BOLT HEAD. HOLES FOR BOLTS SHALL BE BORED 1/32" MAXIMUM OVERSIZE. RETIGHTEN ALL BOLTS BEFORE CLOSING IN.	BE FORMED PEF 10. UNLESS DETAILE BEAMS SHALL H THE BOTTOM ST
A A A A A A A A A A A A A A A A A A A	6. FOUNDATION PLATES FOR ALL EXTERIOR WALLS, SHEAR WALLS AND BEARING WALLS SHALL BE BOLTED WITH 5/8-INCH DIAMETER ANCHOR BOLTS AT 4'-0" O.C. MAXIMUM, UNLESS NOTED OTHERWISE ON FOUNDATION PLANS AND SHEARWALL SCHEDULE. BOLTS SHALL BE EMBEDDED AT LEAST SEVEN INCHES INTO CONCRETE. PROVIDE A MINIMUM OF TWO BOLTS PER PIECE LOCATED NOT MORE THAN 12 INCHES FROM EACH END.	DISCONTINUOUS OR 12" MIN., W 11. REINFORCE ALL 6X6 W1.4XW1.4
BRICATED AND ERECTED IN		
O BE PERFORMED BY	7. DOUBLE TOP PLATES ON ALL EXTERIOR AND BEARING PARTITIONS SHALL LAP 4'-0" MINIMUM AT SPLICES AND HAVE 6-16d MINIMUM AT SPLICE, U.O.N.	TESTING AND INSPECT
ETRATION U.O.N. ALL FILLET D ON THICKNESS OF MATERIAL	<ul> <li>8. BLOCKING AND BRIDGING:</li> <li>A. PROVIDE SOLID BLOCKING BETWEEN JOISTS AND RAFTERS OVER SUPPORTS.</li> <li>B. PROVIDE BRIDGING BETWEEN ROOF JOISTS AT 10'-0" O.C. MAXIMUM.</li> </ul>	1. PROVIDE " <u>SPECI</u> 1995 CALIFORNI SECTIONS 306 / A) CONCRETE:
NO MORE THAN 1/16" REQUIRED, PROVIDE E STRUCTURAL MEMBER.	C. PROVIDE SOLID BLOCKING FOR FULL DEPTH OF FLOOR JOISTS AT 10'-0" O.C. MAXIMUM. D. PROVIDE 2X SOLID BLOCKING BETWEEN STUDS AT MID-HEIGHT IN WALLS 8'-0" HIGH AND HIGHER.	OF REINFOR B) ANCHOR BC CONCRETE: DURING THE
JPPORTING WOOD FRAMING DS AT 24" ON CENTER TYPICAL,	9. PARTITIONS PARALLEL TO JOISTS: PROVIDE DOUBLE JOIST UNDER PARTITIONS.	OR EPOXY (PROVIDE TI C) REINFORCIN
P DRAWINGS PER CHITECT FOR REVIEW PRIOR	10. NAILING SCHEDULE: FOLLOW NAILING SCHEDULE AS SET FORTH IN TABLE 25-Q OF THE LATEST UNIFORM BUILDING CODE. NAILS MAY BE BOX OR COMMON WIRE, AS ALLOWED IN FOOTNOTES OF TABLE 25-Q. NAILS CALLED FOR ON PLANS AND DETAILS SHALL BE COMMON WIRE. HOT- DIPPED GALVANIZED NAILS SHALL BE USED WHERE EXPOSED TO WEATHER.	D) GROUTING ( E) GROUTED A F) DRILLED PIE G) HOLD-DOWN H) SHOP AND
GALVANIZED, U.O.N. NOT SPECIFICALLY SHOWN,	11. LEAD HOLES FOR LAG SCREWS SHALL BE 1/16" LESS THAN THE DIAMETER OF THE THREADED PORTION OF SCREW.	2. SPECIAL INSPEC
T OR INTENT TO DETAIL THOSE APPROVAL TO NISHKIAN AND DEPARTMENT, CITY OF	12. PLYWOOD SHEATHING: A. GENERAL: EACH PANEL SHALL BE IDENTIFIED WITH THE GRADE— TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION AND SHALL MEET THE REQUIREMENTS OF THE U.S. PRODUCT STANDARD PS 1. DO NOT USE ANY PLYWOOD PIECE WITH LEAST DIMENSION OF LESS THAN 2'-0". ROOF - 15/32" PLYWOOD SHALL BE: APA RATED SHEATHING,	TESTING AND IN MANAGEMENT IN COPIES OF THE UNIVERSITY'S BU ENGINEER AND
EARING CONCRETE GRADE N-1. MORTAR SHALL E REQUIREMENTS, EXCEPT	C-D EXTERIOR. PLYWOOD NAILING SHALL BE WITH 10d NAILS SPACED AS FOLLOWS: EDGE NAIL @ 6"o.c. AND FIELD NAIL @ 12"o.c NO BLOCKING IS REQUIRED. SEE PLAN FOR PLYWOOD LAYOUT. FLOORS - 23/32" PLYWOOD SHALL BE APA RATED STURD-I-FLOOR	
; PROVIDE CONCRETE 1 COMPRESSIVE STRENGTH OF 2 TYPE S MORTAR 0PTION, STRENGTH MAY BE 2N 2105.3.	T&G EXTERIOR. PLYWOOD NAILING SHALL BE WITH 10d NAILS SPACED AS FOLLOWS: EDGE NAIL @ 6"o.c. AND FIELD NAIL @ 12"o.c NO BLOCKING IS REQUIRED. SEE PLAN FOR PLYWOOD LAYOUT. APPLY GLUE BETWEEN FLOOR FRAMING MEMBERS AND PLYWOOD PRIOR TO NAILING.	
HORIZONTAL REINFORCING. PATTERN, UNLESS OTHERWISE	B. FLOOR AND ROOF: INSTALL PLYWOOD CONTINUOUS OVER TWO OR MORE SPANS, WITH FACE GRAIN ACROSS SUPPORTS. STAGGERED END PANEL JOINTS. ALLOW 1/16-INCH SPACING AT PANEL ENDS AND	
DRM TO THE REQUIREMENTS HORIZONTAL REINFORCING TYPICAL UNLESS OTHERWISE BE ONE PIECE, NO SPLICE,	1/8—INCH SPACING AT PANEL EDGES. C. PANEL SHEATHED SHEAR WALLS: APA RATED SHEATHING, (PLYWOOD OR O.S.B.) EXTERIOR. SEE PLANS AND SHEAR WALL SCHEDULE FOR PANEL GRADE,	
UR HEIGHT IS 4 FEET. TILLED SOLID WITH GROUT, ICIFICATIONS. WWELS SHALL BE SET TO	THICKNESS AND SHEAR WALL SCHEDULE FOR FAILLE GRADE, THICKNESS AND NAILING REQUIREMENTS. INSTALL HORIZONTALLY OR VERTICALLY OVER TWO OR MORE SUPPORTS. ALLOW SAME SPACING BETWEEN PANELS AS INDICATED ABOVE FOR FLOOR AND ROOF. BLOCK ALL EDGES.	
STEEL. SHALL BE GROUTED SOLIDLY T SURROUNDING THE BOLT. FFACE AND HEIGHT OF		
G IS REQUIRED FOR ALL		

- IG STEEL SHALL BE PLACED IN CONFORMANCE WITH E REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318 ED EDITION), AND THE "ACI DETAILING MANUAL" AS HE PROJECT DRAWINGS AND SPECIFICATIONS.
- TEEL TO BE ASTM A615, GRADE 60 DEFORMED BARS, #3 UNLESS NOTED. WELDED WIRE FABRIC TO BE ASTM A185. ES SHALL BE 40 DIAMETERS OR 2'-O" MINIMUM UNLESS ED ON SCHEDULE. MAINTAIN 1-1/2" CLEAR MINIMUM LEL BARS.
- NG STEEL AND EMBEDMENTS TO BE HELD SECURELY IN TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS KING ON REINFORCEMENT. NO BRICK OR POROUS L BE USED TO SUPPORT REINFORCING. EINFORCING IS PROHIBITED UNLESS APPROVED BY
- GINEER. SHALL BE PLACED IN RELATIVE POSITION SHOWN ON THE SPLICES IN REINFORCING WILL BE PERMITTED UNLESS STRUCTURAL DRAWINGS.
- DATION DOWELS TO MATCH SIZE AND SPACING OF WALL EINFORCEMENT. EXTEND DOWELS 50 DIAMETER MINIMUM COLUMN AND TERMINATE WITH STANDARD HOOK 3" ABOVE OTING, UNLESS NOTED OTHERWISE. PROVIDE EINFORCEMENT WHEREVER POSSIBLE.
- R TO REINFORCING: 3" WHERE CONCRETE IS POURED 2" WHERE EXPOSED TO EARTH BUT PLACED IN FORMS; SED TO WEATHER; 3/4" FOR STRUCTURAL SLAB; 3/4" FOR ABS ABOVE GRADE NOT EXPOSED TO WEATHER; 1-1/2" FOR LUMNS ABOVE GRADE.
- I GRADE SHALL HAVE JOINTS INSTALLED TO PROVIDE Y 20-FOOT SQUARES, UNLESS DETAILED OTHERWISE ON WHERE CONCRETE POURS ARE STOPPED, THE JOINT SHALL ER TYPICAL CONSTRUCTION JOINT DETAIL. LED OTHERWISE, REINFORCING STEEL IN CONTINUOUS GRADE HAVE THE TOP STEEL SPLICED AT MID-SPAN AND
- TEEL SPLICED OVER SUPPORTS (30 DIA. MIN.). AT ENDS, THE TOP STEEL SHALL BE BENT DOWN 12 DIA. WHICHEVER IS GREATER. SEE SCHEDULE. ARCHITECTURAL CONCRETE WITH WELDED WIRE FABRIC: MINIMUM, U.O.N.
- <u>FION:</u>
- IAL INSPECTIONS" FOR ALL ITEMS AS REQUIRED BY THE IA BUILDING CODE WITH 1994 UNIFORM BUILDING CODE, AND 1701 INCLUDING THE FOLLOWING:
- DURING THE TAKING OF TEST SPECIMENS AND PLACING RCED CONCRETE. DLTS AND REINFORCING DOWELLS EPOXIED INTO EXISTING E INSTALLATION OF DOWELS AND THE PLACING OF CONCRETE AROUND SUCH DOWELS. TENSION TABLE FOR TESTING REQUIREMENTS)
- NG STEEL: DURING PLACING OF REINFORCING STEEL. OF COLUMN BASE PLATES.
- ANCHORS. IERS. IN INSTALLATION.
- FIELD WELDING
- CTION SHALL BE PERFORMED BY AN APPROVED INDEPENDENT INSPECTION AGENCY PROVIDED BY THE UCSF/FACILITIES INSPECTION DEPARTMENTS INSPECTOR. TESTING AND INSPECTION REPORT SHALL BE SENT TO THE UILDING/INSPECTION DEPARTMENT, ARCHITECT, STRUCTURAL OWNER.

## GENERAL:

- 1. THESE GENERAL NOTES APPLY UNLESS SPECIFICALLY NOTED OTHERWISE.
- 2. ALL CONSTRUCTION, TESTING AND INSPECTION SHALL CONFORM TO THE CALIFORNIA BUILDING CODE, 1995 EDITION.
- 3. ALL DETAILS ARE TYPICAL. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS SIMILAR TO THOSE SHOWN. SUBJECT TO REVIEW.
- 4. VERIFY ALL EXISTING FEATURES AND CONDITIONS (DIMENSIONS, ELEVATIONS, ETC.) PRIOR TO START OF CONSTRUCTION.
- 5. OMISSIONS OR DISCREPANCIES BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS FOR WORK SHOWN ON THESE DRAWINGS AND ANY SHORING, UNDERPINNING, BRACING OR SCAFFOLDING REQUIRED TO COMPLETE THIS WORK.
- 7. SEE ARCHITECTURAL DRAWINGS FOR ITEMS AND/OR DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. COORDINATE ARCHITECTURAL WORK WITH THE STRUCTURAL WORK. OPENINGS IN FLOORS, BEAMS, OR JOISTS LARGER THAN THOSE SHOWN ON TYPICAL DETAILS OF STRUCTURAL DRAWINGS SHALL BE REVIEWED BY STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 8. DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING, AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.
- 9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER SPECIFICATIONS TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION.
- 10. DESIGN LIVE LOADS: FLOORS: 40 PSF + 20 PSF PARTITION; 100 PSF AT CORRIDOR ROOFS: 20 PSF (REDUCIBLE) COURTYARD: 100 PSF
   11. LATERAL LOADS WIND: BASIC WIND SPEED 70 MPH EXPOSURE B
- SEISMIC: V= 0.138W (ZONE 4)
- 1. FOUNDATION DESIGN IS BASED ON SOILS REPORTS BY TREADWELL & ROLLO, INC. 555 MONTGOMERY ST., SUITE 1300, SAN FRANCISCO, CA. 94111. TEL: (415) 955-9040. PROJECT NUMBER: 2029.01 DATED NOVEMBER 8, 1996.
- SOILS ENGINEER SHALL VERIFY CONDITION AND/OR ADEQUACY OF ALL SUBGRADES, FILLS AND BACKFILLS BEFORE PLACEMENT OF FOOTINGS, SLABS, FILLS AND BACKFILLS, ETC. PROVIDE THE SOILS ENGINEER REPORT TO UCSF/FACILITIES MANAGEMENT INSPECTION DEPARTMENT.
- 3. SIDES OF FOUNDATIONS SHOWN STRAIGHT ARE FORMED. FOUNDATIONS POURED AGAINST THE EARTH AT CONTRACTOR'S OPTION REQUIRE THE FOLLOWING PRECAUTIONS: SLOPE SIDES OF EXCAVATIONS AS APPROVED BY SOILS ENGINEER AND BE RESPONSIBLE FOR CLEAN-UP OF SLOUGHING BEFORE, DURING AND AFTER PLACING CONCRETE. INCREASE FOOTING DIMENSION BY 2 INCHES MINIMUM.
- 4. CONTRACTOR TO PROVIDE FOR DE-WATERING OF EXCAVATION FOR EITHER SURFACE WATER, GROUND WATER OR SEEPAGE, IF REQUIRED.
- 5. BACKFILL OVER-EXCAVATED FOOTINGS WITH CONCRETE OF SAME DESIGN STRENGTH AS FOOTING CONCRETE.
- 6. NO CONCRETE SHALL BE POURED IN ANY FOUNDATION UNTIL EXCAVATION HAS BEEN INSPECTED AND APPROVED BY THE ENGINEER.
- 7. FOUNDATION TYPE:

FOUNDATION:

DRILLED PIERS: SKIN FRICTION

1000 PSF, SEE SOILS REPORT

- 8. STEP CONTINUOUS FOOTINGS AT VARYING ELEVATIONS PER TYPICAL DETAIL. SLOPING FOOTINGS IS PROHIBITED.
- 9. ALL FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED SOIL. BOTTOM OF FOOTINGS SHOWN ON THE DRAWINGS ARE MINIMUM AND SHALL BE LOWERED AS REQUIRED TO REMOVE SOFT AND LOOSE MATERIAL.

# CONCRETE:

- 1. ALL CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH ACI 318. USE MIXES WITH MAXIMUM AGGREGATE SIZE APPROPRIATE FOR FORM AND REBAR CLEARANCES TO BE ENCOUNTERED. (SEE A.C.I.)
- 2. THE PROPOSED MATERIALS AND MIX DESIGN SHALL BE FULLY DOCUMENTED AND REVIEWED BY THE OWNER'S TESTING LABORATORY. RESPONSIBILITY FOR OBTAINING THE REQUIRED DESIGN STRENGTH IS THE CONTRACTOR'S. SUBMIT TEST DATA ON EACH PROPOSED MIX FOR REVIEW IN ACCORDANCE WITH 1994 UBC SECTION 2605. MIX DESIGNS SUBMITTED WITHOUT THE REQUIRED TEST DATA WILL BE RETURNED WITHOUT REVIEW.
- 3. NOMINAL WEIGHT (145 PCF) STONE AGGRAGATE CONCRETE SHALL HAVE THE FOLLOWING 28-DAYS STRENGTHS (MINIMUM fc'):

FOOTINGS:	3000 PSI
DRILLED PIERS:	3000 PSI
GRADE BEAMS:	4000 PSI
WALLS:	4000 PSI
SLABS ON GRADE:	3000 PSI
EXTERIOR FLATWORK:	3500 PSI
ALL OTHER CONCRETE, U.O.N.:	3000 PSI

- 4. SCHEDULING OF WORK MAY REQUIRE DESIGN STRENGTH IN SHORTER PERIODS OF TIME (LESS THAN 28 DAYS).
- 5. PORTLAND CEMENT SHALL CONFORM TO A.S.T.M. C-150 TYPE I OR II, LOW ALKALI, SEE SOILS REPORT.
- 6. AGGREGATE FOR HARDROCK CONCRETE SHALL CONFORM TO ALL REQUIREMENT SAND TESTS OF A.S.T.M. C-33 AND PROJECT SPECIFICATIONS. EXCEPTIONS MAY BE USED ONLY WITH PERMISSION OF THE STRUCTURAL ENGINEER. USE LIMESTONE COARSE AGGREGATE FOR STRUCTURAL SLAB AND SLAB ON GRADE CONSTRUCTION.
- AGGREGATE FOR LIGHTWEIGHT CONCRETE SHALL CONFORM TO A.S.T.M. C-330.
   CONSTRUCTION JOINTS SHALL BE THOROUGHLY ROUGHENED BY SAND BLASTING OR MECHANICAL MEANS. CLEAN BEFORE NEW POUR. LOCATION TO BE APPROVED BY THE STRUCTURAL ENGINEER.
- 9. ALL CONCRETE TO BE REINFORCED UNLESS SPECIFICALLY NOTED "NOT REINFORCED".
- 10. MAXIMUM SLUMP SHALL BE FOUR INCHES, UNLESS NOTED OTHERWISE.
- 11. GROUT UNDER BASEPLATES, SILL PLATES, ETC. SEE SPECIFICATIONS.
- 12. CONDUIT OR PIPE SIZE (O.D.) SHALL NOT EXCEED 30% OF SLAB THICKNESS, AND SHALL BE PLACED FOUR DIAMETERS MINIMUM APART, UNLESS SPECIFICALLY DETAILED OTHERWISE.
- PROJECTING CORNERS OF BEAMS, WALLS, COLUMNS, ETC., SHALL BE FORMED WITH A 3/4" CHAMFER, UNLESS OTHERWISE NOTED ON ARCHITECTURAL DRAWINGS.
- 14. PRIOR TO PLACING CONCRETE, THE CONTRACTOR SHALL ENSURE THAT ALL EMBEDMENTS, INCLUDING COLUMN ANCHOR BOLTS, ARE PROPERLY LOCATED AND SECURELY TIED IN PLACE.
- SUBMIT LOCATION PLAN FOR ALL PROPOSED JOINTS NOT INDICATED ON DRAWINGS FOR APPROVAL PRIOR TO WORK.
   ALL CONCRETE REINFORCEMENT AND PLACEMENT SHALL BE INSPECTED BY
- ALL CONCRETE REINFORCEMENT AND PLACEMENT SHALL BE INSPECTED BY THE UCSF/FACILITIES MANAGEMENT INSPECTION DEPARTMENT: INSPECTOR OF RECORD AND TESTING LABORATORY INSPECTOR.

