

OCCUPANT LOAD

AREA (SF)	OCCUPANCY GROUP	FACTO K	LOAD
5,518	ACCESSORY STORAGE AREA, MECHANICAL EQUIPMENT ROOM	300	19
5,518	TOTALS		19

Architect's Stamp

Engineer's Stamp



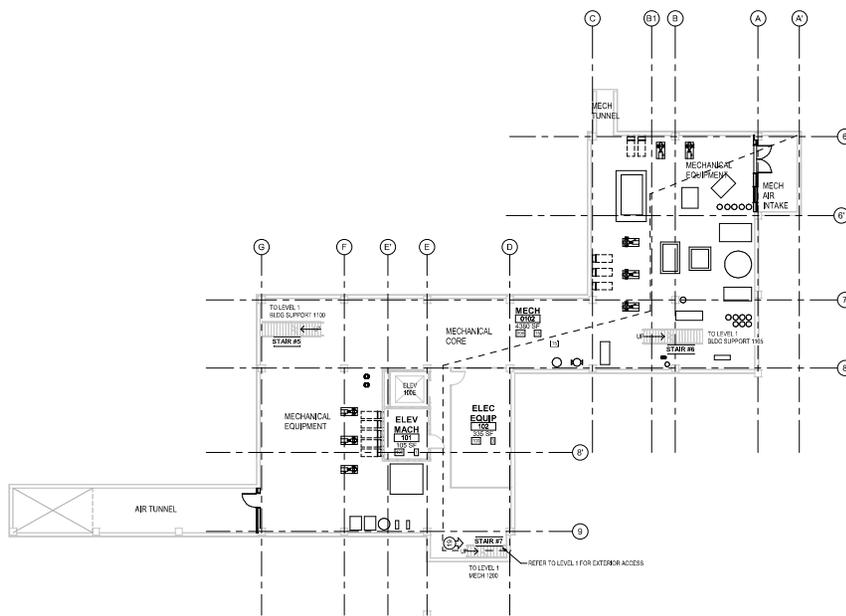
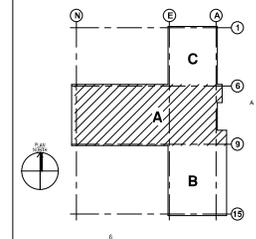
TRAVEL DISTANCE

PATH	TOTAL DISTANCE
T5	219' 0"

LEGEND

- XXXXX — ROOM NAME
- XXX X — ROOM NUMBER
- XXX SF — ROOM AREA
- XXX — OCCUPANT LOAD
- XX — OCCUPANT LOAD FACTOR
- ===== 1-HR RATED WALL
- ===== 1 1/2-HR RATED WALL
- ===== 2-HR RATED WALL
- Path --- PATH OF TRAVEL
- ⬆️ EGRESS OCCUPANT LOAD
- ➡️ DIRECTION OF EGRESS
- ➡️ EXIT MECHANISM
- ⬆️ R, R.XX — RECTANGULAR
- ⬆️ R, R.XX — RECTANGULAR
- ⬆️ EGRESS PATH
- ▭ INTERIOR WALKWAYS, CORRIDORS AND HALLWAYS
- ▨ EXTERIOR WALKWAYS, CORRIDORS AND HALLWAYS

KEY PLAN



B2 LEVEL 0 - LIFE SAFETY PLAN
302' x 142'

950464
University of
California Riverside
Batchelor Hall -
Building Systems
Renewal

900 University Ave.
Riverside, CA 92507

Project Manager | Diane Hendriks
Project Architect | Zhu Wu
Structural Engineer | Venetia Chikriyansky
Mechanical Engineer | James Williams
Electrical Engineer | Kelly Heston
Interior Designer | Ruby Thong
Laboratory Planner | Matt Filer

MARK	DATE	DESCRIPTION	ALTERNATE SCOPE DEFINITION
	7/8/20		
	10/20/20		
	10/16/20		

Project Number | 10041463
Original Issue | 12/25/2019

Scale:	Drawn By:	Checked By:	Project Number:	DSA Number:	UCR Project Manager:	Byline Wilson	Author:	CD Approval:
			10041463					

Sheet Name
**LEVEL 0 BASEMENT
LIFE SAFETY PLAN**

Sheet Number
G-110

Project Status
100% CONSTRUCTION

OCCUPANT LOAD

AREA (SF)	OCCUPANCY GROUP	FACTOR	LOAD
719	ASSEMBLY WITHOUT FIXED SEATING (ENCLOSURES PERMITTED)	15	49
2,886	LABORATORIES, NON-EDUCATIONAL	100	30
793	LABORATORIES, EDUCATIONAL	50	16
8,610	BUSINESS AREA	100	93
2,681	ACCESSORY STORAGE AREA, MECHANICAL, EQUIPMENT ROOM	300	11
15,689	TOTALS		199

Architect's Stamp

Engineer's Stamp



TRAVEL DISTANCE

PATH	TOTAL DISTANCE
T1	148' 10"
T2	142' 9"
T3	120' 11"
T4	129' 4"
T5	69' 8"

LEGEND

XXXXX — ROOM NAME
 XXXX X — ROOM NUMBER
 XXX SF — ROOM AREA
 XXX XX — OCCUPANT LOAD
 — OCCUPANT LOAD FACTOR

===== 1 HR RATED WALL
 ===== 2 HR RATED WALL
 ===== 2 HR RATED WALL

→ PATH OF TRAVEL

⊕ EGRESS OCCUPANT LOAD

← DIRECTION OF EGRESS

← EXIT DISCHARGE

P, XXX — WIDTH PROVIDED
 R, XXX — WIDTH REQUIRED

→ EGRESS PATH

INTERIOR WALKWAYS, CORRIDORS AND HALLWAYS
 EXTERIOR WALKWAYS, CORRIDORS AND HALLWAYS

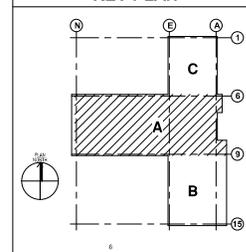
950464
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 Batchelor Hall - Building Systems Renewal
 900 University Ave.
 Riverside, CA 92507

Project Manager Diane Harbin
Project Architect Zhu Wu
Structural Engineer Victor Chingyuan
Mechanical Engineer James Worriss
Electrical Engineer Andy Heston
Interior Designer Ruby Thong
Laboratory Planner Matt Fife

MARK	DATE	DESCRIPTION
7/8/20		ALTERNATE SCOPE DEFINITION
10/2/20		BUILDING PERMIT SUBMISSION
10/16/20		BDP SET

Project Number: 1004163
 Original Issue: 12/25/2019

KEY PLAN



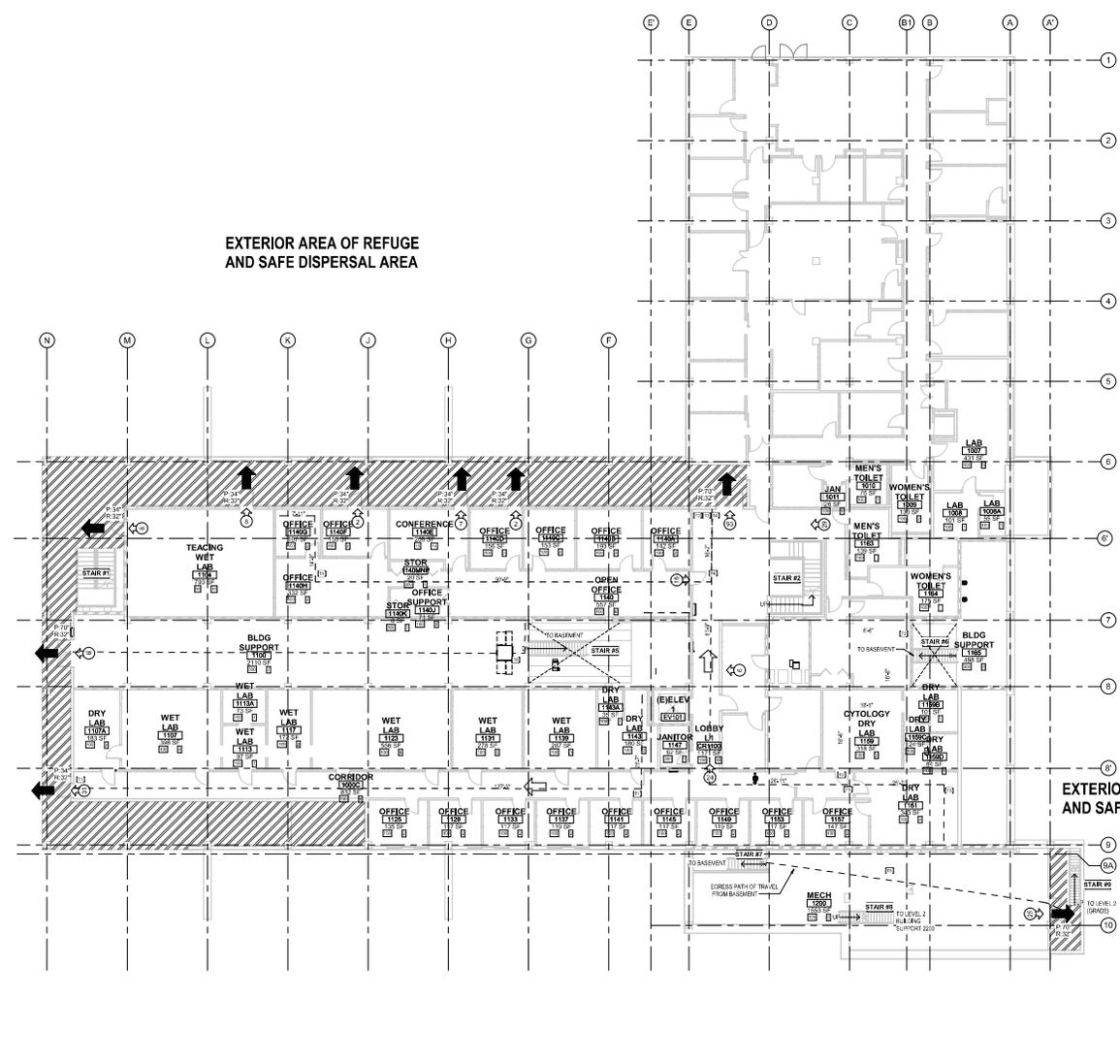
UCR Project Manager: Bryan Wilson

Scale:	As Shown	% CD Approval:	—
Drawn By:	Author	% CD Approval:	—
Checked By:	Checker	% CD Approval:	—
Project Number:	1004163	Construction	—
DSA Number:		Release:	—

Sheet Name
LEVEL 1 LIFE SAFETY PLAN

Sheet Number
G-111

Project Status
 100% CONSTRUCTION



B1 LEVEL 1 - LIFE SAFETY PLAN
 11/27/20



OCCUPANT LOAD

AREA (SF)	OCCUPANCY GROUP	FACTOR	LOAD
1,081	ASSEMBLY WITHOUT FIXED SEATS (UNCONCENTRATED)	15	73
6,729	LABORATORIES, NON-EDUCATIONAL	100	62
10,096	BUSINESS AREA	100	124
3,828	ACCESSORY STORAGE AREA, MECHANICAL EQUIPMENT ROOM	300	20
21,734	TOTALS		289

TRAVEL DISTANCE

PATH	TOTAL DISTANCE
T1	1543'
T2	1439'
T3	1113'
T4	1021'
T5	977'
T6	1815'
T7	771'
T8	1239'
T9	3811'
T10	697'
T11	1441'
T12	1229'

LEGEND

XXXXX — ROOM NAME
 XXXX X — ROOM NUMBER
 XXX SF — ROOM AREA
 XXX — OCCUPANT LOAD
 XX — OCCUPANT LOAD FACTOR

===== EMBING 1 HR RATED WALL
 ===== 1 HR RATED WALL
 ===== EMBING 2 HR RATED WALL
 ===== 2 HR RATED WALL

← — PATH OF TRAVEL

→ — EGRESS OCCUPANT LOAD

← — DIRECTION OF EGRESS

↔ — EXIT DISCHARGE

— — WIDTH PROVIDED
 - - - - - WIDTH REQUIRED

— — EGRESS PATH

— — INTERIOR WALKWAYS, CORRIDORS AND HALLWAYS
 - - - - - EXTERIOR WALKWAYS, CORRIDORS AND HALLWAYS

Architect's Stamp: _____ Engineer's Stamp: _____



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Project Manager: Diane Harbin
 Project Architect: Zhu Wu
 Structural Engineer: Victor Chingyuan
 Mechanical Engineer: James Worries
 Electrical Engineer: Andy Heston
 Interior Designer: Ruby Thong
 Laboratory Planner: Ken Filer

MARK	DATE	DESCRIPTION
10/16/20	7/8/20	ALTERNATE SCOPE DEFINITION
10/16/20	10/16/20	BUILDING SYSTEMS RENOVATION - BLDG SET

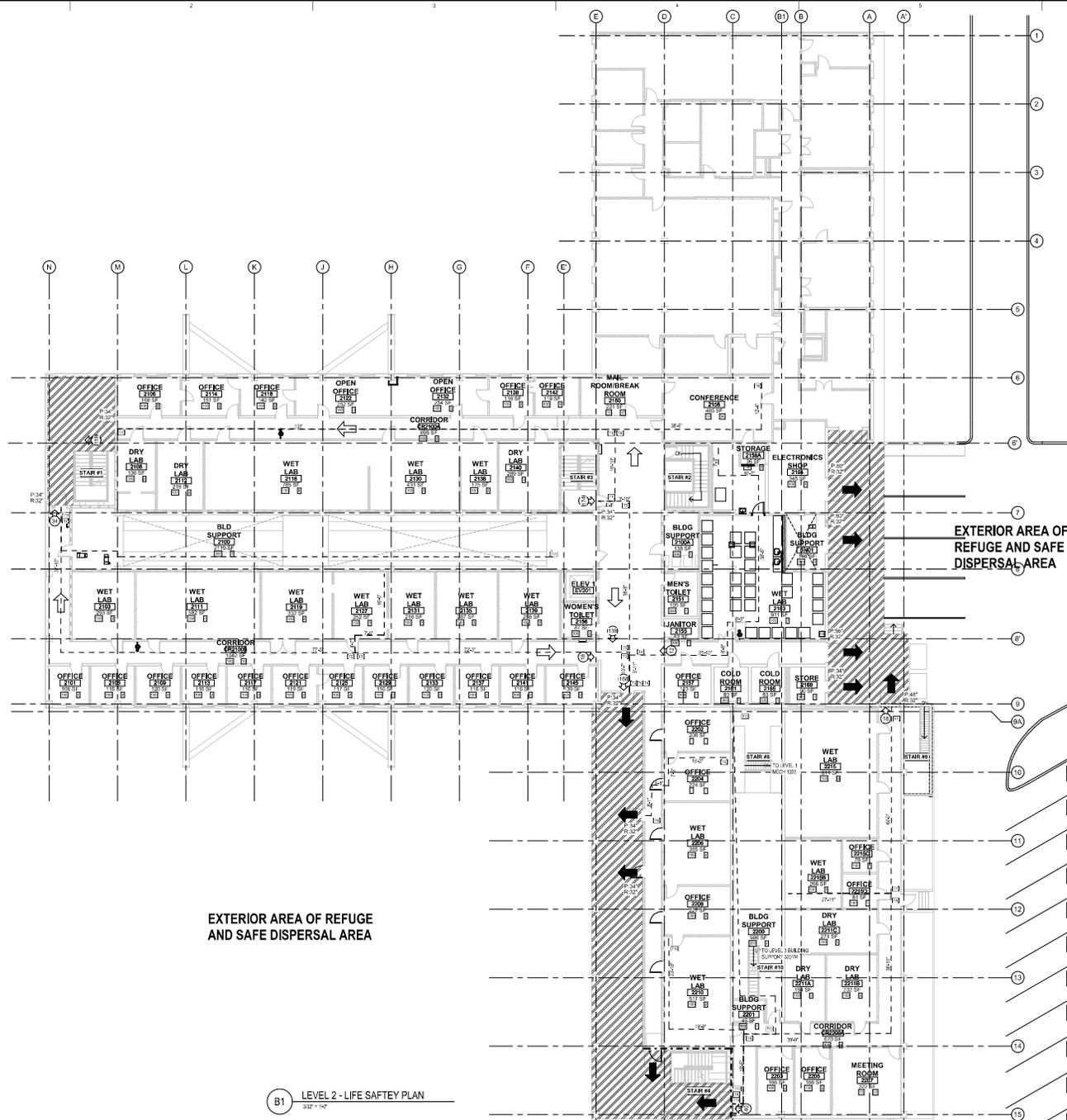
Project Number: 1004163
 Original Issue: 12/25/2019

UCR Project Manager: Bryan Wilson
 Scale: _____
 Drawn By: _____
 Checked By: _____
 DSA Number: _____

Sheet Name: **LEVEL 2 LIFE SAFETY PLAN**

Sheet Number: **G-112**

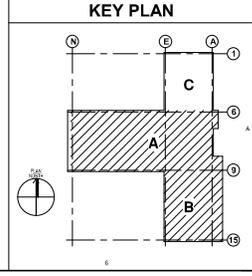
Project Status: 100% CONSTRUCTION



EXTERIOR AREA OF REFUGE AND SAFE DISPERSAL AREA

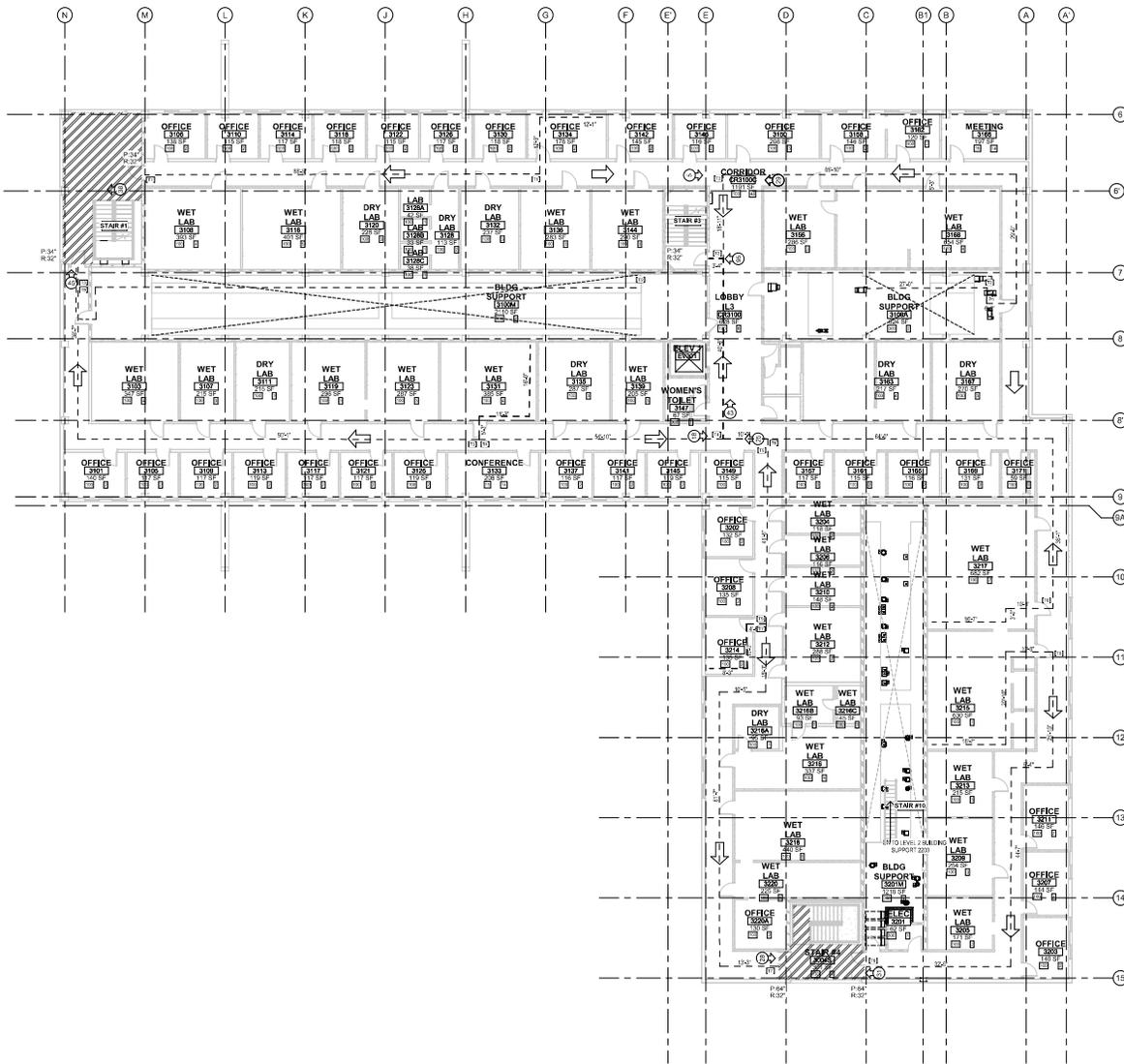
EXTERIOR AREA OF REFUGE AND SAFE DISPERSAL AREA

B1 LEVEL 2 - LIFE SAFETY PLAN
 3/2" = 1" = 0'



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C1 LEVEL 3 - LIFE SAFETY PLAN
312' x 142'

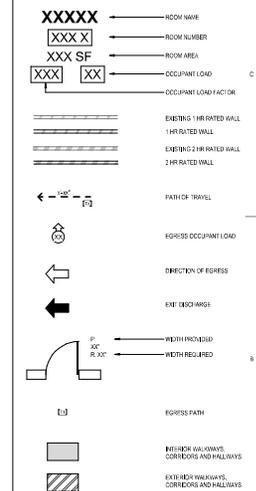
OCCUPANT LOAD

AREA (SF)	OCCUPANCY GROUP	FACTOR	LOAD
419	ASSEMBLY WITHOUT FIXED SEATS (UNCONCENTRATED)	15	28
7,993	LABORATORIES, NON-EDUCATIONAL	100	87
12,807	BUSINESS AREA	100	138
4,069	ACCESSORY STORAGE AREA, MECHANICAL EQUIPMENT ROOM	300	16
25,279	TOTALS		269

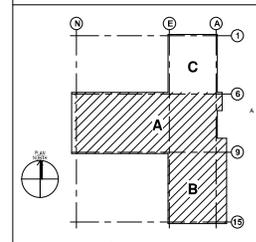
TRAVEL DISTANCE

PATH	TOTAL DISTANCE
T1	115'8"
T2	154'3"
T3	161'2"
T4	130'11"
T5	118'6"
T6	161'1"
T7	122'5"
T8	169'5"
T9	148'1"

LEGEND



KEY PLAN



Architect's Stamp Engineer's Stamp



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University of California Riverside
Batchelor Hall - Building Systems Renewal

900 University Ave.
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Project Manager: Diane Harde
Project Architect: Zhu Wu
Structural Engineer: Victor Chingyan
Mechanical Engineer: James Worries
Electrical Engineer: Kelly Heston
Interior Designer: Riley Trapp
Laboratory Planner: Matt Filer

MARK	DATE	DESCRIPTION	ALTERNATE SCOPE DEFINITION
	7/8/20		
	10/16/20		BUILDING EGRESS SIGNAGE
			BD SET

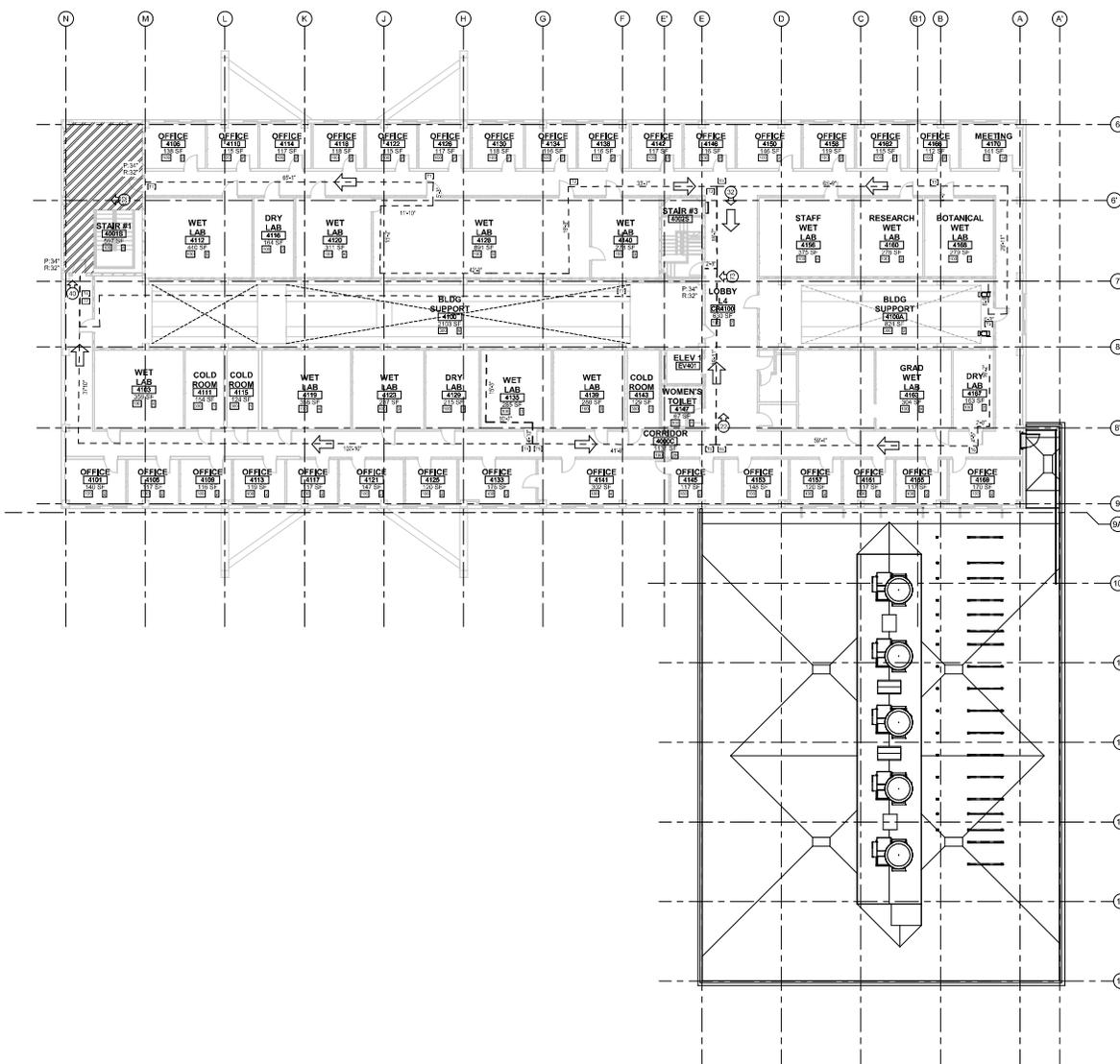
Project Number: 1004163
Original Issue: 12/25/2019

UCR Project Manager: Bryan Wilson
Scale: ---
Drawn By: ---
Checked By: ---
DSA Number: ---

Sheet Name: LEVEL 3 LIFE SAFETY PLAN

Sheet Number: G-113

Project Status: 100% CONSTRUCTION



C1 LEVEL 4 - LIFE SAFETY PLAN
3/27/19

OCCUPANT LOAD

AREA (SFT)	OCCUPANCY GROUP	FACTOR	LOAD
142	ASSEMBLY WITHOUT FIXED SEATS (UNCONCENTRATED)	15	10
5,283	ARENAS, THEATERS, NON-EDUCATIONAL	100	61
8,378	BUSINESS AREA	100	108
3,139	ACCESSORY STORAGE AREA, MECHANICAL EQUIPMENT ROOM	300	16
16,942	TOTALS		195

Architect's Stamp

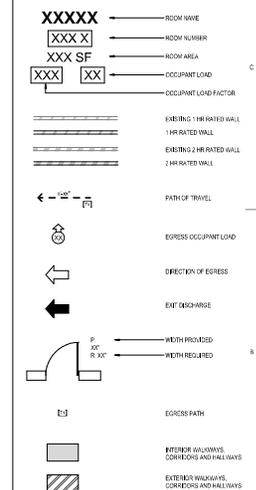
Engineer's Stamp



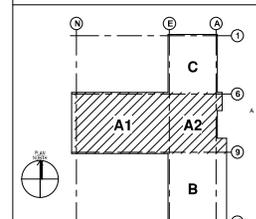
TRAVEL DISTANCE

PATH	TOTAL DISTANCE
T1	122'0"
T2	92'3"
T3	124'4"
T4	171'1"
T5	114'9"
T6	125'2"
T7	142'8"

LEGEND



KEY PLAN



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University of
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Project Manager Diana Harbin
Project Architect Zhu Wu
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Mechanical Engineer James Worries
Electrical Engineer Kelly Peterson
Interior Designer Riley Throp
Laboratory Planner Matt Fife

MARK	DATE	DESCRIPTION	ALTERNATE SCOPE DEFINITION
	7/8/20	BUILDING SYSTEMS RENOVATION	BD SET
	10/16/20		

Project Number: 1004163
Original Issue: 12/25/2019

UCR Project Manager: Bryan Wilson
Scale: ---
Drawn By: ---
Checked By: ---
DSA Number: ---

Sheet Name
**LEVEL 4
LIFE SAFETY PLAN**

Sheet Number
G-114

Project Status
100% CONSTRUCTION



950464
University of
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Project Manager
Structural Engineer
Mechanical Engineer
Electrical Engineer
Interior Designer
Laboratory Planner

Danio Hinz
Zhi Wu
James Worries
Kelly Henshaw
Rajiv Trapp
Neil Tiller

MARK	DATE	DESCRIPTION
	7/8/20	ALTERNATE SCOPE DEFINITION
	9/23/20	BUILDING SYSTEMS DESIGN
	10/16/20	BD SET

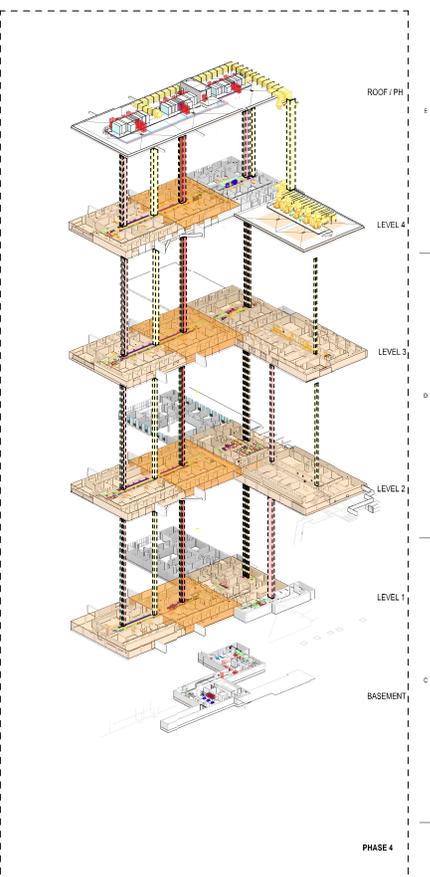
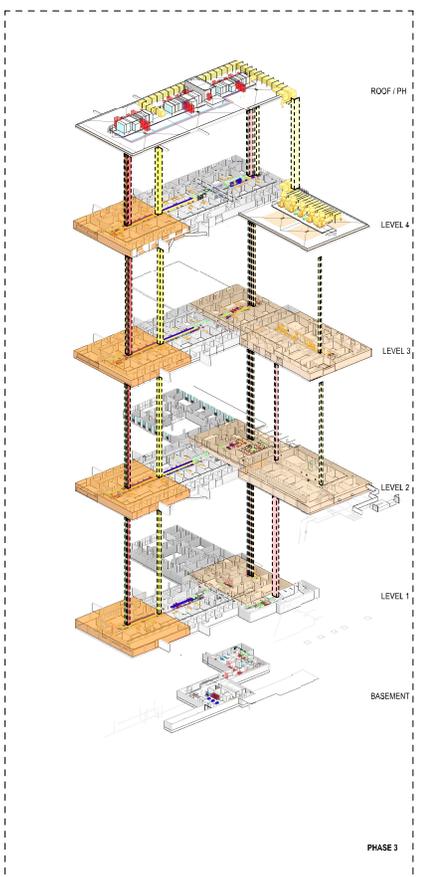
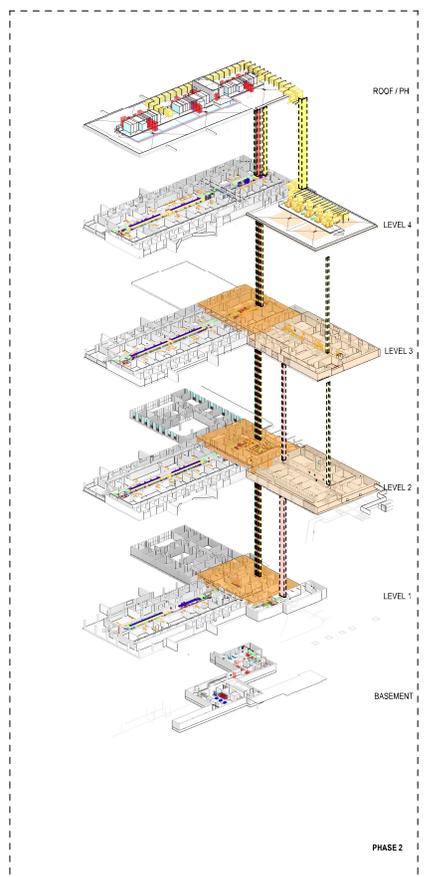
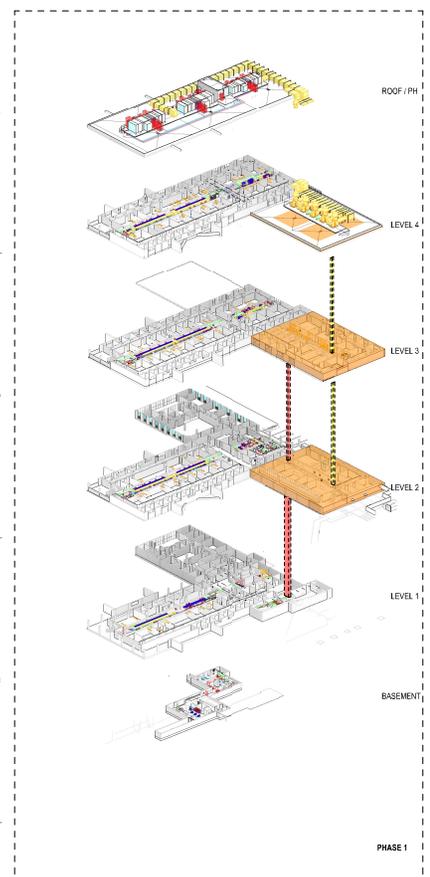
Project Number: 1004163
Original Issue: 1/25/2019

UCR Project Manager:	Byline Wilson
Scale:	% CD Approval: —
Drawn By:	Author: —
Checked By:	% CD Approval: —
Project Number:	1004163
DSA Number:	Release: —

Sheet Name
**CONCEPTUAL PHASING
AXONS DIAGRAMS &
NARRATIVE**

Sheet Number
G-201

Project Status
100% CONSTRUCTION



- ACTIVE PHASE
- DEMOLISH
- SUPPLY
- RETURN

CONCEPTUAL PHASING DIAGRAM NOTES:

<p>THE REPLACEMENT OF THE BUILDING INFRASTRUCTURE MUST MINIMIZE THE QUANTITY AND LENGTH OF OUTAGES AS THE BUILDING WILL REMAIN IN OPERATION THROUGHOUT THE RENOVATIONS. THE PHASING OF EACH DISRUPTIVE SCOPE MUST ALSO ACCOMMODATE THE PHASING FOR ALL OTHER SCOPES.</p> <p>THE FOLLOWING IS NOT INTENDED TO PROVIDE AN ALL-ENCOMPASSING PHASING PLAN BUT RATHER A GENERAL APPROACH THAT WILL NEED SOME FURTHER DETAIL COORDINATION WITH THE ACTUAL FIELD CONDITIONS AND PHASING PLANS OF ALL OTHER PHASES.</p> <p>ALL WORK MUST PROVIDE TEMPORARY UTILITIES FOR DURATIONS WHICH ARE DEEMED UNACCEPTABLE BY THE UNIVERSITY.</p> <p>ARCHITECTURAL AND STRUCTURAL SCOPE TO BE COORDINATED WITH THE OWNER AND COMPLETED AS REQUIRED WITHIN EACH PHASE. FOR SCOPE THAT IS NOT PHASE DEPENDENT SUCH AS STAIR MODIFICATIONS, CONTRACTOR SHALL COORDINATE WITH CAMPUS FIRE MARSHAL AND OWNER FOR REQUIRED WORK.</p> <p>MECHANICAL BASEMENT LEVEL</p> <ul style="list-style-type: none"> REPLACE EXISTING CHILLED WATER PUMPING, AND THE STEAM/HEATING WATER SYSTEM IN ORDER TO FACILITATE THE NEW AIR HANDLERS IN LATER PHASES. REPLACE EXISTING STEAM-TO-WATER HEATING HOT WATER HEAT EXCHANGERS. RECONFIGURE CHILLED WATER PUMPING FROM PULL THROUGH TO PUSH THROUGH. INSTALL NEW WINDWALLS ON THE WEST AND EAST FACADES. PROVIDE ANY TEMPORARY CHILLED/HEATING HOT WATER GENERATION AND PUMPING TO EXISTING DISTRIBUTION MAINS. <p>PHASE 1</p> <p>ELECTRICAL (MECHANICAL LOADS IN BASEMENT REDUCED)</p> <ul style="list-style-type: none"> INSTALL NEW 480/277 SERVICE AND DISTRIBUTION PANELS IN THE BASEMENT. PROVIDE NEW FEEDS TO THE MECHANICAL PHASE 1 LOADS. <p>MECHANICAL ROOF LEVEL</p> <ul style="list-style-type: none"> REMOVE EXISTING EXHAUST FANS WITHIN THE PENTHOUSE AND ASSOCIATED DUCTING WITHIN THE CORE. INSTALL NEW EXHAUST FANS ON THE ROOF, AND NEW DUCTING/DEVICES WITHIN THE CORE RECONNECTING TO EXISTING. INSTALL NEW DUCTING HEADERS ON THE ROOF. PROVIDE ANY TEMPORARY EXHAUST SYSTEMS TO THE EXISTING DISTRIBUTION MAINS. 	<p>PHASE 2</p> <p>ELECTRICAL (WEST CORE DEMOLISHED AND NEW MECHANICAL SYSTEMS)</p> <p>MECHANICAL</p> <ul style="list-style-type: none"> PROVIDE A TEMPORARY FEED TO THE EXISTING 208/120 V DISTRIBUTION BOARD LOCATED IN THE EVN CORE AREAWAY. INSTALL NEW 480/277 DISTRIBUTION ON ROOF TO SUPPORT NEW MECHANICAL LOADS. INSTALL A NEW 208/120 V DISTRIBUTION BOARD IN THE LEVEL 2 EVN MECHANICAL ELECTRICAL CORE AREAWAY. INSTALL NEW 208/120 V BRANCH PANELS AS NEEDED TO SUPPORT NEW MECHANICAL LOADS. DEMOLISH EXISTING CIRCUITS AS LOADS ARE ELIMINATED. <p>MECHANICAL LEVEL 1-4</p> <ul style="list-style-type: none"> INSTALL TEMPORARY VENTILATION AIR BARRIER TO ISOLATE THE PHASE ZONE. REMOVE EXISTING AC UNITS AND ASSOCIATED DUCTING/OUTLETS WITHIN THE CORE. REMOVE EXISTING EXHAUST FANS WITHIN THE PENTHOUSE AND ASSOCIATED DUCTING WITHIN THE CORE. INSTALL NEW AIR HANDLER ON THE ROOF, AND NEW DUCTING WITHIN THE CORE RECONNECTING TO EXISTING. INSTALL NEW EXHAUST DUCTING ON THE ROOF, AND NEW DUCTING/DEVICES DOWN WITHIN THE MEP CORE RECONNECTING TO EXISTING. INSTALL NEW PIPING HEADERS FOR NEW ROOF AIR HANDLING, AND PIPING HEADERS ON THE ROOF. 	<p>PHASE 4</p> <p>ELECTRICAL (EAST CORE DEMOLISHED AND NEW MECHANICAL SYSTEMS INSTALLED)</p> <ul style="list-style-type: none"> INSTALL NEW 208/120 V BRANCH PANELS AS NEEDED TO SUPPORT NEW MECHANICAL LOADS. DEMOLISH EXISTING CIRCUITS AS LOADS ARE ELIMINATED. <p>MECHANICAL LEVEL 1-4</p> <ul style="list-style-type: none"> INSTALL TEMPORARY VENTILATION AIR BARRIER TO ISOLATE THE PHASE ZONE. REMOVE EXISTING AC UNITS AND ASSOCIATED DUCTING/OUTLETS WITHIN THE MEP CORE. REMOVE EXISTING EXHAUST FANS WITHIN THE PENTHOUSE AND ASSOCIATED DUCTING WITHIN THE CORE. INSTALL NEW AIR HANDLERS ON THE ROOF, AND NEW DUCTING WITHIN THE CORE RECONNECTING TO EXISTING. INSTALL NEW EXHAUST DUCTING ON THE ROOF, AND NEW DUCTING/DEVICES DOWN WITHIN THE MEP CORE RECONNECTING TO EXISTING. INSTALL NEW PIPING HEADERS ON THE ROOF. 	<p>PHASE 6</p> <p>ELECTRICAL (LABORATORY) ASSROOM TENANT IMPROVEMENTS (TI)</p> <ul style="list-style-type: none"> REMOVE EXISTING CIRCUITS THAT ARE A PART OF THE TI PHASING. INSTALL 480/277 V BRANCH PANELS BEING FEED FROM THE 480/277 DISTRIBUTION PANELS INSTALLED IN THE EARLIER PHASES. PROVIDE BRANCH CIRCUITING TO RENOVATION. INSTALL 480/277 V LIGHTING PANELS FEED FROM THE NEW 480/277 SERVICE. REMOVE LIGHTING CIRCUITS FROM THE TI PHASING. <p>PHASE 7</p> <p>ELECTRICAL (FINAL DEMOLITION)</p> <ul style="list-style-type: none"> REMOVE THE ORIGINAL 208/120 V DISTRIBUTION PANELS AND TEMPORARY FEEDERS WHEN ALL CIRCUITS HAVE BEEN DEMOLISHED OFF OF EACH FLOOR. 	
	<p>PHASE 3</p> <p>ELECTRICAL (WEST CORE DEMOLISHED AND NEW MECHANICAL SYSTEMS)</p> <p>MECHANICAL</p> <ul style="list-style-type: none"> PROVIDE A TEMPORARY FEED TO THE EXISTING 208/120 V DISTRIBUTION BOARD LOCATED IN THE BASEMENT. PROVIDE FEEDS TO NEW MECHANICAL LOADS USING NEW 480/277 DISTRIBUTION ON ROOF (NOT ILLUSTRATED IN PHASE 2). INSTALL A NEW 208/120 V DISTRIBUTION BOARD IN THE LEVEL 2 EVN MECHANICAL ELECTRICAL CORE AREAWAY. INSTALL NEW 208/120 V BRANCH PANELS AS NEEDED TO SUPPORT NEW MECHANICAL LOADS. DEMOLISH EXISTING CIRCUITS AS LOADS ARE ELIMINATED. <p>MECHANICAL LEVEL 1-4</p> <ul style="list-style-type: none"> INSTALL TEMPORARY VENTILATION AIR BARRIER TO ISOLATE THE PHASE ZONE. REMOVE EXISTING AC UNITS AND ASSOCIATED DUCTING/OUTLETS WITHIN THE MEP CORE. REMOVE EXISTING EXHAUST FANS WITHIN THE PENTHOUSE AND ASSOCIATED DUCTING WITHIN THE CORE. INSTALL NEW AIR HANDLER ON THE ROOF, AND NEW DUCTING WITHIN THE CORE RECONNECTING TO EXISTING. INSTALL NEW EXHAUST DUCTING ON THE ROOF, AND NEW DUCTING/DEVICES DOWN WITHIN THE MEP CORE RECONNECTING TO EXISTING. INSTALL NEW PIPING HEADERS ON THE ROOF. 	<p>PHASE 5</p> <p>ELECTRICAL (SOUTH BUILDING RENOVATION)</p> <p>MECHANICAL</p> <ul style="list-style-type: none"> INSTALL A NEW 208/120 V DISTRIBUTION BOARD IN THE BASEMENT BEING SERVED FROM THE EXISTING 300VA TRANSFORMER. INSTALL NEW 208/120 V BRANCH PANELS AS NEEDED TO SUPPORT NEW MECHANICAL LOADS. DEMOLISH EXISTING CIRCUITS AS LOADS ARE ELIMINATED. 		

