

**Building and Safety
Permit Service Center**

All plans and supporting documents must be submitted in electronic format as unsecured, flattened PDF(s) with embedded fonts. Minimum 11"x17" sheet size.

The valuation used in computing the building permit fee shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. BMC Section 19.28.20.

California Licensed General, Electrical, Mechanical, and Plumbing Contractors are required to have a City of Berkeley Business License and must provide Worker's Compensation Carrier and Policy Number prior to or at the time of permit issuance.

Permit Service Center
1947 Center St. 3rd floor
Berkeley, CA 94704
510-981-7500 TTY 6903
permits@cityofberkeley.info

PERMIT APPLICATION

Building - Electrical - Mechanical - Plumbing - Sign

Project Information

Permit #:

Address: Berkeley, CA 94702

Valuation: 10,530,222 APN:

Parcel Conditions

Fire Zone: 1 2 3 Landslide Area Alquist Priolo
Flood Zone: A B C Liquefaction Zone Creek on the Parcel

Project Specific Information

Occupancy: Single-Family/Duplex/ADU Multi-Family Commercial/Industrial

Work Type: New Addition Alteration Demolition Sign

Other:

Permit(s): Building Electrical Mechanical Plumbing

Description of Work: Construction of new 6 story mixed-use building with 78 dwelling units, ground level lobby, parking and commercial, with state of California density bonus.

Work in the public right of way is required: Yes No

	Construction Type	Occupancy Class	Square Footage	No. of Stories	No. of Residential Units	No. of Bedrooms
Existing	IB	M	9,984	1	0	0
Proposed	IA, IIIA	S2,R2,A2	67,481	6	78	86

Residential Rental Units: Yes No Is tenant relocation required? Yes No

Applicant Information

Owner Agent Contractor Design Professional

Name:
Company:
State Lic #:
Address:
Email:

Owner Information

Name:
Address:
Email:

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Project Information

Permit #:

Address:

Mechanical Permit Fees (Minimum \$127.00)

Qty	Fee Item	Fee
Minimum Mechanical Permit Fee includes:		
1	• Mechanical Filing Fee	\$22.00
1	• Mechanical Minimum Permit Fee	\$100.00
1	• Mechanical Technology Fee	5%
81	Air Handling Equipment <i>Up to 10,000CFM</i>	\$26.30
	Air Handling Equipment <i>Over 10,000 CFM</i>	\$39.30
	Boilers and Equipment ² <i>Up to 100 kBTU</i>	\$39.90
2	Boilers and Equipment ² <i>100 - 500 kBTU</i>	\$54.00
	Boilers and Equipment ² <i>Over 500 kBTU</i>	\$129.00
	Central Heating ² <i>Up to 100 kBTU</i>	\$39.70
	Central Heating ² <i>100 - 500 kBTU</i>	\$54.00
	Central Heating ² <i>Over 500 kBTU</i>	\$129.00
112	Ducts, Fans, Registers, Dampers	\$11.90
	Gas Appliances (1-2)	\$13.00
	Gas Appliances (3+)	\$12.00
	Gas Pipe Outlets ^{1,3}	\$5.60
	Gas Piping Extension, Alteration or Repair ^{1,3}	\$12.20
	Gas Pressure Test ¹	\$14.10
	Gas Meters ^{1,3} <i>New or Changed</i>	\$13.10
	Hoods Commercial ² <i>Type I</i>	\$129.00
	Hoods Commercial ² <i>Type II</i>	\$79.70
78	Hoods Residential ²	\$11.80
	Permit Extension	\$57.00
	Pre-fab. Fireplaces ²	\$79.70
2	Vent, Flue, Chimney	\$13.10

1. Do not duplicate fees for gas work on mechanical and plumbing fee schedules
2. Includes attached ducts, flues, vents, registers, and associated electrical, except a new circuit run from panel
3. Includes Pressure Test

Electrical Permit Fees (Minimum \$127.00)

Qty	Fee Item	Fee
Minimum Electrical Permit Fee includes:		
1	• Electrical Filing Fee	\$22.00
1	• Electrical Minimum Fee	\$100.00
1	• Electrical Technology Fee	5%
67481	A. New Residential Buildings & Additions	\$15.00
	• Includes Device Outlets	
	• Per 100 Sq Ft - Enter Total Sq Ft	
	B. Non-Residential Electrical Permit	1%
	• \$100,000 min valuation of electrical work	
	• Includes all itemized fees list below	
	• Enter total valuation of work	
	C. Itemized Fees:	
	Altering/Changing Wiring	\$26.10
	Branch Circuits	\$4.70
	Device Outlets <i>Receptacle, Switch, Light</i>	\$2.70
	Electrical Meters <i>New or Changed</i>	\$7.20
	Electrical Permit Extension	\$57.00
	Electrical Vehicle Charging Station	\$15.90
	Festoon Lighting	\$10.00
	Fixed Appliance Outlet	\$11.10
	Generators - up to 10KV <i>Total KV</i>	\$7.20
	Generators - over 10KV <i>Total KV</i>	\$1.90
	Motors - up to 10 HP <i>Total HP</i>	\$7.20
	Motors - over 10 HP <i>Total HP</i>	\$1.90
	PG&E Service Recheck	\$11.90
	Service - New or Changed <i>Total Amps</i>	\$11.90
	Signs and Outline Lighting	\$26.50
	Solar Photovoltaic System	\$26.10
	Subpanel - New or Changed <i>Total Amps</i>	\$11.90
	Temporary Power Pole	\$26.50
	Transformers - up to 10 KV <i>Total KV</i>	\$4.80
	Transformers - over 10KV <i>Total KV</i>	\$1.90
	X-Ray Capacitors	\$26.50

Plumbing Permit Fees (Minimum \$127.00)

Qty	Fee Item	Fee
1	Minimum Plumbing Permit Fee includes:	
	• Plumbing Filing Fee	\$22.00
1	• Plumbing Minimum Permit Fee	\$100.00
1	• Plumbing Technology Fee	5%
67481	A. New Residential Buildings & Additions	
	• Includes fixtures & interior water lines	\$15.00
	• Per 100 Sq Ft - <i>Enter total Sq Ft</i>	
	B. Itemized Fees:	
425	Fixtures <i>include sanitary drainage/venting</i>	\$12.20
4	Gas Pipe Outlets ¹	\$5.60
	Gas Piping Extension/Alteration/Repair ¹	\$12.20
2	Gas Pressure Test Only ¹	\$14.10
2	Gas Meters <i>New or Changed</i> ¹	1 \$13.10 2+ \$9.10
	Graywater System <i>Single Family Dwelling, Duplex or ADU</i>	\$39.90
	Graywater System <i>All Other Occupancies</i>	\$105.70
15	Inside Rain Leader	\$27.40
	Lawn Sprinkler System <i>Single-Family Dwelling, Duplex or ADU</i>	\$39.90
	Lawn Sprinkler System <i>Other Occupancies</i>	\$105.70
	Nonpotable Rainwater Catchment System <i>Single-Family Dwelling, Duplex or ADU</i>	\$39.90
	Nonpotable Rainwater Catchment System <i>Other Occupancies</i>	\$105.70

Qty	Fee Item	Fee
	B. Itemized Fees (continued):	
	Plumbing Permit Extension	\$57.00
3	Pressure Test <i>Water or Air</i>	\$14.40
	Removal of Illicit Connections	\$12.20
1	Sanitary Sewer Lateral	\$34.00
1	Seismic Gas Shut-Off Valve	\$10.00
	Seismic Gas Shut-Off Valve <i>2+ Group Permit</i>	\$50.00
	Solar Water Heater	\$12.20
	Stand Pipe System	\$129.10
	Subsoil Storm Drainage Piping	\$34.00
	Swimming Pool Filtration System	\$129.10
2	Water Heater	\$12.20
	Water Line <i>Total Outlets</i>	<26 \$24.90 26+ \$2.70
	Water Line <i>Hydronic Water Piping</i>	\$24.90
1	Water Main <i>Total Outlets</i>	<26 \$24.90 26+ \$2.70
2	Water Meters <i>New or Changed</i>	1 \$14.40 2+ \$8.40ea
	Water Meters <i>Backflow Preventer</i>	\$12.20

1. Do not duplicate fees for gas work on mechanical and plumbing fee schedules

Contractor Information for Electrical, Mechanical and Plumbing permits

General
 Mechanical
 Electrical
 Plumbing

Name:

Company:

Address:

Email:

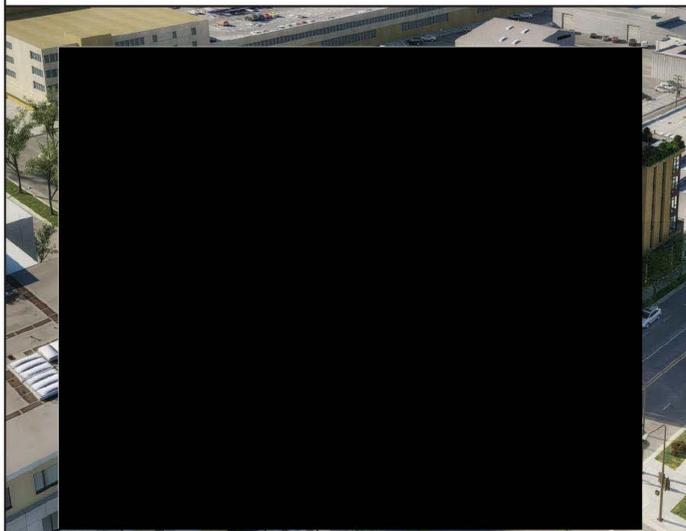
Name:

Company:

Address:

Email:

PROJECT RENDERING



PLANNING & DEVELOPMENT DEPARTMENT
BUILDING & SAFETY DIVISION
REVIEWED FOR CODE COMPLIANCE

Aug 18, 2021
Andrew Cockrell

THIS SET OF CONSTRUCTION DOCUMENTS MUST BE KEPT ON THE PROJECT SITE AT ALL TIMES. ANY DESIGN CHANGES MADE DURING CONSTRUCTION SHALL BE RESUBMITTED FOR APPROVAL AS AN AMENDED SET OF CONSTRUCTION DOCUMENTS.

OWNER
PLEASE READ ALL THE RED MARKS, STAMPS AND UNDERSTAND PRIOR TO PROCEEDING WITH CONSTRUCTION.

VALIDITY OF PERMIT
ISSUANCE OF PERMIT OR APPROVAL OF PLANS SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE ANY ORDINANCES, CODES OR LAWS OF THE CITY OF BERKELEY OR THE STATE OF CALIFORNIA. IT IS ASSUMED THE INFORMATION PROVIDED ON THE PLANS IS ACCURATE. PERMIT EXPIRES ONE YEAR AFTER DATE OF PERMIT ISSUANCE, UNLESS AN EXTENSION HAS BEEN GRANTED.

APPLICABLE CODES
ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF THE 2019 CALIFORNIA BUILDING STANDARDS CODE (CALIFORNIA CODE OF REGULATIONS, TITLE 24) AS ADOPTED BY THE CITY OF BERKELEY (BMC TITLE 19)

PROPERTY LINES
IDENTIFICATION OF PROPERTY LINES ON THE PLANS AND IN THE FIELD IS THE RESPONSIBILITY OF THE OWNER.

CODE COMPLIANCE CHECKLIST ATTACHED

SPECIAL INSPECTION IS REQUIRED
SPECIAL INSPECTION, MATERIAL TESTING, AND STRUCTURAL OBSERVATION AS REQUIRED PER CBC CHAPTER 17.

FIRE PROTECTION SYSTEMS
A SEPARATE FIRE PERMIT FROM THE FIRE PREVENTION DIVISION IS REQUIRED FOR THE INSTALLATION OF OR ALTERATION TO FIRE PROTECTION SYSTEMS.

PUBLIC RIGHT-OF-WAY PERMIT
A SEPARATE RIGHT-OF-WAY PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS IS REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY.

EMERGENCY ESCAPE WINDOW
AN EMERGENCY ESCAPE AND RESCUE WINDOW IS REQUIRED IN BASEMENTS AND EVERY SLEEPING ROOM BELOW THE FOURTH STORY OF GROUP R OCCUPANCIES UNLESS EXEMPTED BY CBC SECTION 1030.1. MINIMUM NET WIDTH IS 20 INCHES, MINIMUM NET HEIGHT IS 24 INCHES AND MINIMUM NET AREA OF 5.7 SQUARE FEET OF OPENING.

SMOKE & CARBON MONOXIDE ALARMS
ARE REQUIRED TO BE INSTALLED IN RESIDENTIAL GROUP R OCCUPANCIES WHEN ALTERATIONS, REPAIRS, OR ADDITIONS REQUIRING A BUILDING PERMIT OCCUR. SMOKE & CARBON MONOXIDE ALARMS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS, AND APPLICABLE PROVISIONS OF CBC, CFC, CFC, AND REFERENCED STANDARDS.

AUTOMATIC GAS SHUTOFF VALVES
INSTALLATION OF AUTOMATIC GAS SHUT-OFF VALVES ARE REQUIRED IN EXISTING BUILDINGS WHEN ANY ADDITION, ALTERATION OR REPAIR IS MADE THAT EXCEEDS THE VALUATION OF \$50,000. (BMC SECTION 19.34.040)

WATER CONSERVING PLUMBING FIXTURES
PRIOR TO FINAL INSPECTION ALL NONCOMPLIANT PLUMBING FIXTURES SHALL BE UPGRADED WITH WATER CONSERVING FIXTURES AS REQUIRED BY CALGREEN SECTION 301.1.1. A COMPLETED AND SIGNED CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED TO THE AREA INSPECTOR.

LEAD HAZARD WARNING
ANYONE CONDUCTING RENOVATION, REPAIR OR PAINTING WORK FOR COMPENSATION (INCLUDING RENTAL PROPERTY OWNERS AND MANAGERS) IN A PRE-1978 RESIDENCE, CHILD CARE FACILITY OR SCHOOL, MUST BE TRAINED, EPA CERTIFIED, AND USE LEAD-SAFE WORK PRACTICES. FAILURE TO IMPLEMENT LEAD-SAFE WORK PRACTICES IS A VIOLATION OF THE CALIFORNIA HEALTH AND SAFETY CODE, SECTIONS 17020.10 AND 105256. FOR MORE INFORMATION VISIT: WWW.ACHHD.ORG.

BAAQMD NOTIFICATION
THE PERMITTEE IS RESPONSIBLE TO COMPLY WITH THE REQUIREMENTS OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD) REGULATION 11, RULE 2 PERTAINING TO DISTURBING REGULATED ASBESTOS-CONTAINING MATERIALS (RACM). PLEASE CONTACT THE BAAQMD AT (415) 749-4762 OR VISIT WWW.BAAQMD.GOV FOR MORE INFORMATION.

PLANNING & DEVELOPMENT DEPARTMENT
LAND USE PLANNING
APPROVED PLANS

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
Aug 23, 2021
REVIEWED FOR
CODE COMPLIANCE

The property owner shall complete, sign and notarized the storm water O & M agreement form and mail to:
Vincent Chen
Engineering Division
1947 Center St., 4th Floor
Berkeley, CA 94704

2. Applicant to obtain an approved Caltrans encroachment permit for awnings encroaching into San Pablo Avenue state right-of-way.

APPROVED ZONING CODE DATA

CITY OF BERKELEY ZONING TABULATIONS			
	PROPOSED	PERMITTED/REQUIRED	ALLOWABLE W/ 35% DENSITY BONUS
NUMBER OF DWELLING UNITS	78		78
COMMERCIAL AREA	1,248		1,248
PARKING	SEE TABLE	SEE TABLE	SEE TABLE
BIKE PARKING	50	2	
FRONT YARD SETBACK (SAN PABLO)	0'-0"	0'	0'
STREET SIDE YARD SETBACK (ASHBY)	4'-6"	0'	0'
STREET SIDE YARD SETBACK (MURRAY)	1'-6"	0'	0'
REAR YARD SETBACK	0'	0'	0'
BUILDING HEIGHT	69' **	**	**
BUILDING STORIES	6 **	**	**
LOT AREA	14,000	14,000	
LOT AREA (ACRES)	0.32	0.32	
GROSS FLOOR AREA (SEE TABLE)	56,075		
BUILDING FOOTPRINT	12,075	14,000	
LOT COVERAGE	86%	100%	
USABLE OPEN SPACE (SEE TABLE)	SEE TABLE	SEE TABLE	
BASE PROJECT FAR	NA	NA	
DENSITY BONUS PROJECT FAR	4.01	4.05	

FAR CALCULATIONS			
	BASE PROJECT ALLOWABLE	ALLOWABLE W/ 35% DENSITY BONUS	PROPOSED W/ DENSITY BONUS
SITE AREA	14,000	14,000	14,000
FAR	3.00	4.05	4.01
FLOOR AREA	42,000	56,700	56,075

DWELLING UNIT TABLE					
UNITYTYPE	STUDIO	LOFT	1-BED	2-BED	TOTAL
LEVEL 6	6	4	4		14
LEVEL 5	6	4	4	2	16
LEVEL 4	6	4	4	2	16
LEVEL 3	6	4	4	2	16
LEVEL 2	6	4	4	2	16
GROUND					
TOTAL	30	20	20	8	78
PERCENTAGE OF TOTAL	38%	26%	26%	10%	100%

OPEN SPACE TABLE			
	UNITS	RATIO	TOTAL
BASE UNITS	58	40	2,320
DENSITY BONUS UNITS	20	40	800
TOTAL REQUIRED WITH WAIVERS			3,120
PROPOSED OPEN SPACE CONCESSION			800
TOTAL AREA PROVIDED			2,320
PODIUM LEVEL PRIVATE DECKS			360
ROOF DECK COMMON AREAS			1,960

PARKING CALCULATIONS (Density Bonus Method)					
RESIDENTIAL PARKING	STUDIO	LOFT	1-BED	2-BED	TOTAL
NUMBER OF UNITS	30	20	20	8	
NUMBER OF BEDROOMS PER UNIT	1	1	1	2	
TOTAL BEDROOMS	30	20	20	16	86
RESIDENTIAL PARKING AT .5 SPACES / BEDROOM					43
COMMERCIAL PARKING AREA			RATIO	PER	TOTAL
COMMERCIAL (FOOD USE)	1,248		2	1000	2
TOTAL DENSITY BONUS PARKING REQUIREMENT					45
TOTAL PARKING PROVIDED					43
PROPOSED PARKING CONCESSION					2

BERKELEY FIRE DEPARTMENT
DIVISION OF FIRE PREVENTION
APPROVED
SUBJECT TO FIELD INSPECTION

1. APPROVED subject to Berkeley Fire Department - Fire Prevention Division Field Inspection.
2. Fire Permits Required - Refer to the "Deferred Submittals" block items 1-6 on Sheet A0 for deferred submittals under separate fire permits.
3. Ensure a copy of the recorded easement is published in the building permit drawings.

VICINITY MAP



SYMBOL LEGEND

- ELEVATION/CONTROL POINT
- REVISION NUMBER
- WALL CONSTRUCTION TYPE FLOOR CONSTRUCTION TYPE
- WINDOW SEE WINDOW SCHEDULE
- DOOR SEE DOOR SCHEDULE
- ROOM NUMBER
- REFERENCE GR D - CONCRETE COLUMN CENTER U.O.N.
- REFERENCE GR D - WOOD FRAMING EDGE OF FRAMING U.O.N.
- INDICATES DROPPED CEILING ABOVE

DESIGN REVIEW CONDITIONS

FINAL DESIGN REVIEW WAS APPROVED ON DECEMBER 17, 2020 WITH THE FOLLOWING CONDITIONS AND RECOMMENDATIONS THAT SHOULD BE REFLECTED IN THE PERMIT DRAWINGS. FINAL DESIGN REVIEW WAS APPROVED WITH THE FOLLOWING CONDITIONS:

- ALL WINDOWS ON THIS PROJECT SHALL BE RECESSED CONSISTENT WITH THE APPROVED RENDERINGS AND PRELIMINARY DESIGN REVIEW DETAILS.
- PROVIDE A SAMPLE OF THE PATTERNED SCREEN ON THE PROJECT WINDOW ON-SITE FURTHER ON IN THE CONSTRUCTION PROCESS FOR APPROVAL BY STAFF WITH COMMITTEE ASSISTANCE AS NEEDED.
- THERE SHALL BE NO LIGHTS ON THE BUILDING EXTERIOR. APPROVED EXTERIOR SCENIC WAS THE CYLINDRICAL MODEL.
- OWNER SHALL NOT USE PLASTIC PLANTS IN THE EXTERIOR PLANTER AREAS.

DEFERRED SUBMITTALS

1. FIRE SERVICE: THE DESIGN AND INSTALLATION FOR THE FIRE SPRINKLER UNDERGROUND PIPING AND ASSOCIATED WORK SHALL BE IN ACCORDANCE WITH NFPA 13 AND NFPA 24, 2016 EDITION.
2. FIRE SPRINKLER SYSTEM: THE DESIGN AND INSTALLATION OF THE FIRE SPRINKLER SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 13, 2016 EDITION. THE MECHANICAL PARKING LIFTS/CAR STACKERS MUST BE DESIGNED AS ORDINARY HAZARD GROUP-1 WITH ALL LEVELS FLOWING SIMULTANEOUSLY.
3. STANDPIPE SYSTEM AND HOSE CONNECTIONS: THE DESIGN AND INSTALLATION OF THE STANDPIPE SYSTEM AND HOSE CONNECTIONS SHALL BE IN ACCORDANCE WITH NFPA 14, 2016 EDITION.
- 3.1. A TEMPORARY STANDPIPE WITH FDC SHALL BE PROVIDED PRIOR TO CONSTRUCTION EXCEEDING 40 FEET IN HEIGHT ABOVE THE LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS. CFC §3313.1
4. "AUTOMATIC AND MANUAL" FIRE ALARM AND DETECTION SYSTEM: THE DESIGN AND INSTALLATION OF THE FIRE ALARMS AND DETECTION SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 72, 2016 EDITION.
5. EMERGENCY RESPONDER RADIO COVERAGE (ERRC): NEW BUILDINGS SHALL HAVE APPROVED RADIO COVERAGE FOR EMERGENCY RESPONDERS WITHIN THE BUILDING PURSUANT TO CALIFORNIA FIRE CODE (CFC) §510 AND NFPA 72, 2016 EDITION.
6. TWO-WAY COMMUNICATION SYSTEM: THE DESIGN AND INSTALLATION OF THE TWO-WAY COMMUNICATION SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 72, 2016 EDITION.
7. ELEVATORS
9. PRE-FABRICATED STEEL STAIRS
10. ATS HOLD-DOWN SYSTEM.
11. HVAC ROOF EQUIPMENT PLATFORM SYSTEM.
12. EVACUATION SIGNAGE
13. PHOTOVOLTAIC SYSTEM
14. POST TENSIONED CABLE LAYOUT AND SHOP DRAWINGS

EV PARKING REQUIREMENTS

1. ELECTRIC VEHICLE (EV) CHARGING. AT LEAST 20% OF THE PROJECT PARKING SPACES FOR RESIDENTIAL PARKING SHALL BE "EV CHARGER READY": EQUIPPED WITH RACEWAY, WIRING, AND POWER TO ALLOW FOR FUTURE LEVEL 2 (240 VOLT/40 AMP) PLUG-IN ELECTRIC VEHICLE (EV) CHARGING SYSTEM INSTALLATION
2. AT LEAST 80% OF THE PROJECT PARKING SPACES FOR RESIDENTIAL PARKING SHALL BE EV SPACES RACEWAY EQUIPPED: EQUIPPED WITH A RACEWAY BETWEEN AN ENCLOSED, INACCESSIBLE, OR CONCEALED AREA AND AN ELECTRICAL SERVICE PANEL/SUBPANEL AS SPECIFIED BY THE BERKELEY GREEN CODE (BMC SECTION 19.37.040). ANY LEVEL 2 EV CHARGING SYSTEMS INSTALLED AT PARKING SPACES WILL BE COUNTED TOWARD THE APPLICABLE RATIO REQUIREMENT.

SOIL & GROUNDWATER MANAGEMENT PLAN

- SOIL MANAGEMENT:**
1. ONSITE SOIL HAS BEEN PRE-PROFLED AND NO CONTAMINANTS OF CONCERN HAVE BEEN IDENTIFIED
 2. THE SOIL HAS BEEN APPROVED FOR DISPOSAL AT AN APPROVED FACILITY
 3. EXCAVATED SOIL IS EXPECTED TO BE DIRECT-LOADED INTO TRUCKS
 4. IN THE EVENT SOIL IS TO BE STOCKPILED ON SITE, STOCKPILES SHALL NOT EXCEED 6' IN HEIGHT. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING AND WEIGHED DOWN AT THE END OF EACH WORKDAY.
 5. WATER SHALL BE APPLIED AS NECESSARY DURING SOIL HANDLING AND TRANSPORTATION ACTIVITIES TO MINIMIZE DUST GENERATION.
 6. TRUCKS USED TO OFF-HAUL SOILS SHALL BE COVERED WITH A TARP AND BRUSHED FREE OF LOOSE SOIL PRIOR TO LEAVING THE SITE.
 7. THE CITY'S TOXIC MANAGEMENT DIVISION SHALL BE CONTACTED WITHIN 24-HRS IN THE EVENT THAT SOIL EXHIBITS UNUSUAL CHARACTERISTICS SUCH AS COLOR AND/OR ODOR.
 8. QUESTIONS AND COMMENTS REGARDING ONSITE ACTIVITIES CAN BE DIRECTED TO: DAVE DE JONG (510) 307-5678 EXT. 103
- GROUNDWATER MANAGEMENT:**
1. DUE TO THE SHALLOW NATURE OF THE PLANNED EXCAVATIONS AT THE SITE, GROUNDWATER IS NOT EXPECTED TO BE ENCOUNTERED
 2. IN THE EVENT THAT GROUNDWATER COLLECTS IN OPEN EXCAVATION, GROUNDWATER SHALL BE PUMPED INTO TEMPORARY ON-SITE STORAGE TANKS.
 3. GROUNDWATER SAMPLES SHALL BE COLLECTED FOR PROFILING PURPOSES. THE GROUNDWATER SHALL BE DISPOSED OFF-SITE AT AN APPROVED DISPOSAL FACILITY.

PROJECT DESCRIPTION

PROJECT ADDRESS:
3000 San Pablo Avenue, Berkeley, CA 94702
APN: 053 163300101

SITE AREA:
14,018.31 SF

EXISTING BUILDING AREA:
9,984 SF

SCOPE OF WORK:
Removal of existing 2-story commercial structure and construction of new 6-story mixed-use building with 78-dwelling units, ground level lobbies, parking and shelter only commercial, with state of California density bonus.

SPRINKLERED:
Yes: The building is to be equipped with NFPA 13 automatic sprinkler installed in accordance with CBC Section 903.3.1.1.

The building is to be provided with Class I Standpipe system. CBC Sections 905.3 and 905.4 Standpipe System shall conform to NFPA 14 minimum standards and shall be reviewed and approved by the local fire protection authority prior to installation. Stamped, approved plans must be kept on site for the prevention fire inspector. CBC Section 905.2

OCCUPANCY CLASSIFICATIONS:
STORAGE, GARAGE, COMMERCIAL (SHELL ONLY), MIXED USE APARTMENTS S, B, R2 R-2

CONSTRUCTION TYPE:
TYPE I - A (STORY 1)
TYPE III - A (STORIES 2-6)

NUMBER OF STORIES:
6

USE PERMIT INFORMATION:
Use Permit #2P2019-0155

The Tenant improvements for the commercial space shall be submitted as a separate permit

A Separate demolition permit has been filed for the demolition of the existing building. (permit number B2020-04293)

CODE APPLICABILITY

BUILDING CODES & ORDINANCES:

- 2019 CALIFORNIA BUILDING CODE.
- 2019 CALIFORNIA PLUMBING CODE.
- 2019 CALIFORNIA MECHANICAL CODE.
- 2019 CALIFORNIA ELECTRICAL CODE.
- 2019 CALIFORNIA FIRE CODE.
- 2019 CALIFORNIA EXISTING BUILDING CODE.
- 2019 CALIFORNIA GREEN BUILDING CODE.
- 2019 CALIFORNIA REFERENCED STANDARDS CODE.
- 2019 CALIFORNIA ENERGY CODE.
- CITY OF BERKELEY MUNICIPAL CODE.
- 2010 ADA GUIDELINES FOR ACCESSIBLE DESIGN

CONDITION OF APPROVAL: NO-BUILD WINDOW EASEMENT AGREEMENT SHALL BE REVIEWED BY THE CITY OF BERKELEY AND RECORDED WITH THE ALAMEDA COUNTY RECORDER'S OFFICE PRIOR TO PERMIT ISSUANCE FOR THE CONSTRUCTION OF THIS BUILDING.

NOTE: ANY REFERENCES TO THE SECTIONS OF FORMER BUILDING CODE EDITIONS, SHALL BE CONSTRUED TO APPLY TO THE CORRESPONDING PROVISIONS CONTAINED WITHIN THE 2019 CALIFORNIA BUILDING CODE.

PROJECT DIRECTORY

OWNER:
RI BERKELEY, LLC
2025 Fourth Street
Berkeley, CA 94710

T-24:
GABEL ENERGY
20825 Nunes Ave,
Castro Valley, CA 94546
(510) 428-0803

ARCHITECT:
Trachtenberg Architects
2421 Fourth Street
Berkeley, CA 94710
(510) 649-1414
www.TrachtenbergArch.com

REGISTERED DESIGN PROFESSIONAL:
Mauricio De la Parra
CAB License C32479

GENERAL CONTRACTOR:
WEST BUILDERS
120 Railroad Ave.
Richmond, CA 94801
(510) 525-9378

ACOUSTICS:
WILSON IHRIG
6001 Shellmound St Suite 400,
Emeryville, CA 94608
(510) 658-6719

CIVIL:
LEA & BRAZE ENGINEERING, INC.
2495 Industrial Parkway West
Hayward, CA 94545
(510) 987-4086

WATERPROOFING:
STEELHEAD ENGINEERS
2570 W. El Camino Real
Suite 320, Mountain View, CA 94040
(650) 941-1154

ELECTRICAL:
CIMINO ELECTRIC INC.
3267 Dutton Ave,
Santa Rosa, CA 95407, USA
(707) 542-6231

MECHANICAL:
LITZENBERGER
3000-F Danville Blvd #209,
Alamo, CA 94507
(925) 899-7462

PLUMBING:
TAO, LTD.
135 Wright Brothers Ave
Livermore, CA 94551
(925) 583-6454

GEOTECHNICAL ENGINEERING:
ROCKRIDGE GEOTECHNICAL
270 Grand Avenue
Oakland, CA 94610
(510) 420-5738

JOINT TRENCH CONSULTING:
NORCOAST ENGINEERING
771 Joni Ct,
Windsor, CA 95492, USA
(707) 838-4492

LANDSCAPE ARCHITECTURE:
JETT LANDSCAPE ARCHITECTURE
2 Theatre Square • Suite 218 •
Orinda CA 94563
(925) 254-5422

STRUCTURAL ENGINEER:
VERTECH ENGINEERING
782 Higuera St STE 206
San Luis Obispo, CA 93405, USA
(805) 284-9520



AQUATIC ASHBY

3000 SAN PABLO AVE. BERKELEY, CA 94702

REVISION	BUILDING PERMIT SET
3 11.20.20	BUILDING PERMIT SET
4 03.10.21	PLAN CHECK #1
5 04.30.21	PLAN CHECK #2

Telesis Engineers
APPROVED
Date: Aug 18, 2021 By: [Signature]

PLANNING & DEVELOPMENT DEPARTMENT
BUILDING & SAFETY DIVISION
Aug 18, 2021
REVIEWED FOR
CODE COMPLIANCE

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 1901 DRAWN BY: Author
SCALE: 1/2" = 1'-0" PHASE: BID SET

SHEET:

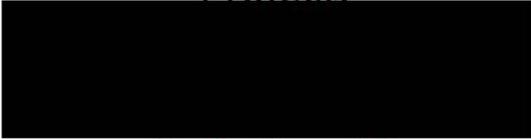
TITLE SHEET

A0



Structural Calculations

Project:



Berkeley, CA

Project No.:



Date: 11/20/2020



[REDACTED]

March 9, 2021

Project No. [REDACTED]

[REDACTED]

Subject: Geotechnical Review – Structural Plans
Proposed Mixed-Use Building
[REDACTED]
Berkeley, California

Dear [REDACTED],

This letter presents the results of our geotechnical review of the structural plans prepared for the proposed mixed-use building to be constructed at [REDACTED] in Berkeley, California. We performed a geotechnical investigation for the project and presented our findings and recommendations in a report dated October 11, 2019.

We understand this project is being permitted under the 2019 California Building Code (ASCE 7-16). We reviewed the geotechnical aspects of the structural plans, Sheets S1.0 through S4.9, prepared by VerTech Structural and dated November 20, 2020 (Building Permit Submittal). Based on our review, we conclude the above-referenced structural plans are in general conformance with the intent of the recommendations contained in our October 11, 2019 report.

We trust that this letter provides you with the information you requested. If you have any questions, please call.

Sincerely yours,

[REDACTED]

[REDACTED]

Prepared for

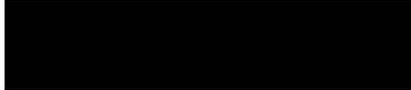
GEOTECHNICAL INVESTIGATION

BERKELEY, CALIFORNIA

***UNAUTHORIZED USE OR COPYING OF THIS DOCUMENT IS STRICTLY
PROHIBITED BY ANYONE OTHER THAN THE CLIENT FOR THE SPECIFIC
PROJECT***

October 11, 2019

Project No.

CCR Title 24 Noise Study Report

November 2, 2020

Prepared for:



Prepared by:



BUILDING ENERGY ANALYSIS REPORT

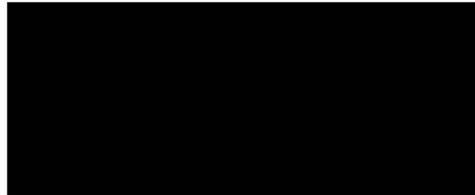
PROJECT:



Project Designer:



Report Prepared by:



Job Number:



Date:

11/12/2020

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2019 Building Energy Efficiency Standards.

This program developed by





PLANNING & DEVELOPMENT

Land Use Planning, 1947 Center Street, Berkeley, CA 94704
Tel: 510.981.7410 TDD: 510.981.6347 Fax: 510.981.7420
Email: planning@cityofberkeley.info

ZONING CERTIFICATE APPLICATION – *Building Permits*

ZCBP # 20 [REDACTED]

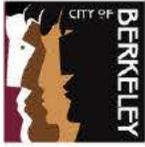
BP # _____

Address: [REDACTED]		Suite/Unit #: _____	
Project Description:			
Use of Building/Property:		Existing: _____ Proposed: _____	
Related Permits: Have any of the following been approved or requested for this project?			
<input type="checkbox"/> AUP <input type="checkbox"/> Use Permit <input type="checkbox"/> Design Review <input type="checkbox"/> Landmarks			
Project Details (check all that apply):			
<input type="checkbox"/> In-kind repair/replacement (includes windows, decks, siding, etc.) <input type="checkbox"/> New building or enclosed structure (gross floor area: _____ sq. ft.) <input type="checkbox"/> Addition to existing building or enclosed structure (gross floor area: _____ sq. ft.) <input type="checkbox"/> Conversion of garage, basement, or attic to habitable space (gross floor area: _____ sq. ft.) <input type="checkbox"/> Demolition (includes removal/replacement of exterior wall or roof framing: ____% walls; ____% roof) <input type="checkbox"/> Removal or pruning of coast live oak tree – indicate circumference at 4' above ground: ____ in.			
<u>Exterior changes:</u>		<u>Addition or removal of:</u>	
<input type="checkbox"/> Windows (new/enlarged openings)		<input type="checkbox"/> Bedrooms (as defined on reverse)	
<input type="checkbox"/> Decks (expanded or new)		<input type="checkbox"/> Interior walls separating commercial spaces?	
<input type="checkbox"/> Water heater		<input type="checkbox"/> Parking spaces	
<input type="checkbox"/> Other: _____		<input type="checkbox"/> Residential kitchens	
Impervious Surfaces: Does the project create or replace 2,500 square feet or more of impervious surface area? (See reverse for further details)			
<input type="checkbox"/> No <input type="checkbox"/> Yes: _____ sq. ft. (submit required stormwater checklist to PSC)			
Applicant Information:			
Name: [REDACTED]		Address: [REDACTED]	
Phone: [REDACTED]		City/State/Zip: [REDACTED]	

I hereby certify that the above information is true and complete to the best of my knowledge.

Applicant's Signature: _____ **Date:** ____ / ____ / ____

STAFF USE ONLY			
Intake Planner: _____ Zone: _____		Approved by: _____ Date: ____ / ____ / ____	
Zoning Fee: <input type="checkbox"/> \$60 <input type="checkbox"/> \$200 <input type="checkbox"/> \$400		Ordinance Section(s): _____	
Route to: <input type="checkbox"/> DR <input type="checkbox"/> LM <input type="checkbox"/> PW (C.3)		Approval comments: _____	



PLANNING & DEVELOPMENT

Land Use Planning, 2120 Milvia Street, Berkeley, CA 94704
Tel: 510.981.7410 TDD: 510.981.6903 Fax: 510.981.7420
Email: Planning@ci.berkeley.ca.us

DATE STAMP HERE

III.C.7. Zoning and Building Application Information: Impervious Surfaces

Complete at both the development application stage (in order to encourage minimizing increases in the amount of impervious surface) **and** at the building application stage (to document what is actually being constructed) for all projects on lots 10,000 square feet or greater that have been applied for since February 19, 2003.

Date of Application: _____

Type of Application: parcel/tentative/vesting/tract/map site development review building permit

Project Location or Address:* _____, CA

Project Name (if applicable): _____

Type of Project:*

- Commercial Industrial Residential Public Agency

Property Owner's Name: _____

Applicant's Name: _____

- Owner Contractor Engineer/Architect Developer

Applicant Address: _____

Applicant Phone: _____

Total Lot (or Parcel/Tract) Area in Sq. Ft.:* _____ APN: _____

Type of Impervious Surface	Pre-Project Condition in Sq. Ft. (if applicable)	Proposed Project Improvements in Sq. Ft.
Building(s) Footprint (including attached garage)		
Hard surfaces: driveway(s), patio(s), parking lot(s), impervious decking(s), etc.		
Accessory structures: garage(s), carport(s), shed(s), other miscellaneous structures		
Off-lot Impervious Surface (Streets, Sidewalks)	N/A	
Total Impervious Surface in Square Feet		*

Check box if proposed project's total impervious surface is over: 43,560 sq. ft. 10,000 sq. ft.

Check box for phase of project: development application building permit application

I declare under penalty of perjury that, to the best of my knowledge, the square footage presented herein is accurate and complete. Incorrect impervious area calculations may delay your project application(s) and/or permit(s).

Signature of Applicant

Date

* Indicates field required by NPDES permit provision C.3.n.i. Other permit requirements may also apply.

EMERGENCY RESPONDER RADIO COVERAGE SYSTEM (ERRCS)

SCOPE OF WORK

PROVIDE MATERIALS AND LABOR TO INSTALL A 700MHz ERRCS PER THE CITY OF BERKELEY EMERGENCY RESPONDER RADIO COVERAGE GUIDELINE

ERRCS INSTALLATION:

1. INSTALL A ERRCS TO PROVIDE PUBLIC SAFETY RADIO COVERAGE FOR ALL AREAS OF THE BUILDING NOT RECEIVING THE REQUIRED NATIVE SIGNAL LEVEL STRENGTH FROM OUTSIDE SIGNAL SOURCE.
2. ERRCS DESIGN CREATED TO COVER ALL AREAS OF THE STRUCTURE FAILING TO RECEIVE THE REQUIRED SIGNAL STRENGTH FROM THE OUTSIDE SIGNAL SOURCE.
3. ERRCS DESIGN BASED ON WORSE CASE SCENARIO (IF ALL LEVELS WERE TO FAIL BENCHMARK RADIO TESTING).
4. PENDING BENCHMARK RADIO TESTING, INTERIOR ANTENNA TO BE INSTALLED AT AREAS OF THE STRUCTURE FAILING TO MEET THE REQUIRED RADIO SIGNAL STRENGTH FROM THE LOCAL DONOR TOWER, ERRCS DESIGN TO COVER ALL AREAS FAILING TO ACHIEVE THE REQUIRED SIGNAL STRENGTH OF -95dBm OR GREATER AT 90% OF THE ENTIRE STRUCTURE AND 99% OF THE STRUCTURE'S CRITICAL AREAS, AS DEFINED BY NFPA 72/1221 AND CFC 510. IF LESS ANTENNA COVERAGE IS REQUIRED, AS-BUILTS WILL BE PROVIDED FOR AFTER THE SYSTEM HAS BEEN FINALIZED.

CODE COMPLIANCE:

1. THE SYSTEM SHALL COMPLY WITH THE CALIFORNIA BUILDING CODE 2019 EDITION, CALIFORNIA FIRE CODE 2019 EDITION, NFPA 72 2019 EDITION, CALIFORNIA ELECTRICAL CODE 2019 EDITION, NFPA 1221 2016 EDITION AND BERKELEY ORDINANCES, POLICIES, AND STANDARDS.
2. A DISTRIBUTED ANTENNA SYSTEM SHALL BE INSTALLED TO ACHIEVE THE REQUIRED ADEQUATE RADIO COVERAGE PER CALIFORNIA FIRE CODE 510.
3. PRIMARY POWER SUPPLY SHALL BE PROVIDED BY A DEDICATED BRANCH CIRCUIT RATED AT NO LESS THAN 20 AMPS, AND PROVIDING 120VAC NOMINAL PER SECTION G3.6.2 AND CALIFORNIA FIRE CODE 510.
4. SECONDARY POWER WILL BE SUPPLIED BY A DEDICATED 24-HOUR BATTERY BACKUP UPS AS REQUIRED BY CFC 510.4.2.3. WHEN PRIMARY POWER IS LOST, THE POWER SUPPLY TO THE EMERGENCY RESPONDER RADIO COVERAGE SYSTEM SHALL AUTOMATICALLY TRANSFER TO THE SECONDARY POWER SUPPLY.
5. THE EMERGENCY RESPONDER RADIO COVERAGE SYSTEM SHALL BE MONITORED FOR THE FOLLOWING PER NFPA 1221 9.6.13.1:
 - 6.1. NORMAL AC POWER
 - 6.2. LOSS OF NORMAL AC POWER
 - 6.3. UPS/BATTERY CHARGER FAILURE
 - 6.4. LOW-BATTERY CAPACITY (TO 70% DEPLETION)
 - 6.5. DONOR ANTENNAE MALFUNCTION
 - 6.6. ACTIVE RF EMITTING DEVICE MALFUNCTION
 - 6.7. SYSTEM COMPONENT MALFUNCTION
7. THE OWNER OF THE FACILITY SHALL BE RESPONSIBLE FOR MAINTAINING REQUIRED UTILITIES SO AS TO PROVIDE FOR THE CONTINUOUS OPERATION OF THE PROTECTION SYSTEM. THIS SHALL INCLUDE DEDICATED PRIMARY POWER SUPPLY BE MEANS OF DEDICATED BRANCH CIRCUIT.
8. THE DEVICES AND CONDUIT LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE. LOCATIONS MAY NEED TO BE ADJUSTED SLIGHTLY DURING INSTALLATION TO ACCOMMODATE BUILDING CONSTRUCTION FEATURES.
9. THIS SYSTEM WAS DESIGNED BY: FCC FEDERAL RADIO/TELEPHONE OPERATORS LICENSEE JORDAN BURNETT (FRN NO. 0025250069) OF REDROCK SECURITY & CABLING, INC. (SEE FCC LICENSE LOCATED ON THIS COVER PAGE)

[REFER TO PAGE ERRCS-0.0B FOR CITY OF BERKELEY BPSCS GUIDELINES]

EQUIPMENT LIST AND SYMBOLS

EMERGENCY RESPONDER RADIO SYSTEM EQUIPMENT LIST

SYMBOL	QTY.	DESCRIPTION	MODEL #
[BDA]	1	COMBA 700MHz PUBLIC SAFETY BI-DIRECTIONAL AMPLIFIER, RADIO SIGNAL BOOSTER, 1/2W OUTPUT, CLASS A	RX07V1-A2748-UL
[A1]	1	COMBA INDOOR OMNI ANTENNA, 698-2700MHZ W/RF TAG FOR ALARM, FOR MOUNTING DIRECTLY TO PULLBOX	IXD-360V05NT40-RT
[A2]	5	COMBA OMNI-DIRECTIONAL ANTENNA, LOW-PROFILE, 698-2700MHZ, 2.0dBi GAIN W/ RF TAG FOR ALARMING	IXD-360H04NTS3-RT
[DA]	1	WESTELL YAGI, 746-896MHZ, 10/11DBI GAIN, 8-ELEMENT	CLS-CSI-AY746-896/11
N/A	450'	COMMSCOPE PLENUM RATED, 1/2", COAXIAL CABLE	AL4RPV-50
N/A	25	TIMES MICROWAVE 3/8" FLEXIBLE LOW LOSS COMMUNICATIONS COAX -OUTDOOR APPLICATION	LMR-400
[ZW]	3	2-WAY SPLITTERS, 698-2700MHz	Rxx-ON300C(XH)
[UPS]	1	COMBA 24 HOUR BATTERY BACKUP UNIT IN NEMA-4 CABINET, 48V 60AH DAS BBU UL2524 COMPLIANT UP TO 110W FOR 24HR UL2524 LISTED	CPBBU2-48060-UL
[AMS]	1	COMBA ANTENNA MONITORING SYSTEM MAIN CONTROL UNIT, DC -48V	CP-AMS-V1-MCU48
[FACP]	1	FIRE ALARM SYSTEM - FIRE ALARM CONTROL PANEL (SYSTEM INSTALLED AND PROVIDED BY OTHERS)	N/A
[LED]	1	DEDICATED PUBLIC SAFETY RADIO SYSTEM MONITORING UNIT & ANNUNCIATOR PANEL	DSI ES620
[EPO]	1	STI EMERGENCY POWER OFF SWITCH/BUTTON TO COMPLETELY SHUT DOWN THE BDA AND UPS	SS2231PO-EN

WIRE LEGEND

DESIGNATOR	DESCRIPTION	MODEL #
A	1/2" PLENUM COAXIAL CABLE	AL4RPV-50
B	3/8" FLEXIBLE LOW LOSS COMMUNICATIONS COAX	LMR-400

NOTES:

1. FACP WIRING, MODULES AND PROGRAMMING PROVIDED BY OTHERS.
3. 120VAC DEDICATED POWER REQUIRED FOR EXTENDED RUN UPS (PROVIDED BY OTHERS).

PULL BOX AND JUNCTION BOX NOTES:

1. SYSTEMS INSTALLED BY OTHERS UNDER SEPARATE PERMIT.
2. ALL PULLBOXES SUBJECT TO NEC.

SURVIVABILITY NOTE:

1. ERRCS EQUIPMENT ROOM, RISER SYSTEM AND HORIZONTAL RISER FEEDS ARE TO BE CONTAINED WITHIN 2-HOUR RATED ENCLOSURE.

CONDUIT AND PENETRATION NOTES:

1. SYSTEMS INSTALLED BY OTHERS UNDER SEPARATE PERMIT.
2. ALL CONDUIT SUBJECT TO NEC. MINIMUM REQUIRED SIZES ARE SHOWN IN THIS DESIGN.

SURVIVABILITY LEGEND:

- 2-HOUR RATED SPACE
- 2-HOUR RATED WALL

CONDUIT LEGEND:

- 1" EMT CONDUIT
- 1.5" EMT CONDUIT
- 2" EMT CONDUIT

PULL BOX LEGEND:

- 12"X12"X6" PULL BOX W/ ANTENNA
- 12"X12"X6" PULL BOX W/ ANTENNA AND (1) SPLITTER
- 16"X16"X6" PULL BOX W/ (2) RISERS & (1) SPLITTER
- 12"X12"X6" PULLBOX
- 16"X16"X6" PULLBOX W/ (1) RISER
- 16"X16"X6" NEMA-3R BOX ON ROOFTOP W/ (1) RISER
- DENOTES 2" RISER LOCATION

FREQUENCIES

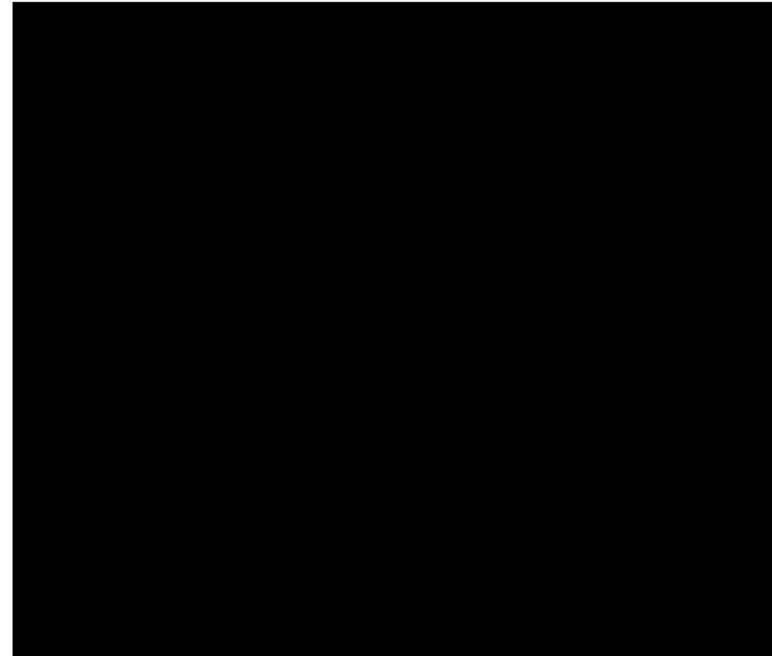
LIST OF ASSIGNED FREQUENCIES - ANY ACTIVE AMPLIFICATION SYSTEM INSTALLED TO MEET THESE REQUIREMENTS SHALL OPERATE ON THE FOLLOWING FREQUENCIES IN REPEAT ANALOG MODE.

700MHz CHANNELS	DOWNLINK FREQUENCY	UPLINK FREQUENCY
1	770.01875	800.01875
2	769.25625	779.25625
3	769.09375	779.09375
4	769.76875	779.76875
5	770.29375	800.29375
6	770.56875	800.56875
7	770.84375	800.84375
8	771.19375	801.19375
9	771.49375	801.49375
10	771.79375	801.79375
11	772.09375	802.09375
12	772.39375	802.39375
13	772.69375	802.69375
14	772.99375	802.99375
15	773.46875	803.46875
16	773.74375	803.74375
17	774.21875	804.21875
18	774.49375	804.49375

EXCEPTION NOTES:

1. ALL LISTED FREQUENCIES MUST HAVE ADEQUATE SIGNAL STRENGTH FOR AMPLIFICATION AT THE EXTERIOR OF THE STRUCTURE(S). A MINIMUM SIGNAL STRENGTH OF -95dBm IS REQUIRED. THE RADIO AMPLIFICATION SYSTEM IS ONLY INTENDED TO DUPLICATE THE EXTERIOR RADIO COVERAGE, NOT IMPROVE UPON IT.
2. EXCEPTION OF AMPLIFICATION FOR A PUBLIC SAFETY RADIO FREQUENCY OR SET OF FREQUENCIES MAY BE GRANTED WHERE IT IS DETERMINED BY THE FIRE CODE OFFICIAL, WITH DOCUMENTED PROOF, THAT THE RADIO COVERAGE SYSTEM IS NOT NEEDED BASED UPON THE EXISTING COVERAGE LEVELS OF THE PUBLIC SAFETY COMMUNICATION SYSTEMS OF THE JURISDICTION AT THE EXTERIOR OF THE BUILDING.

PROJECT INFORMATION



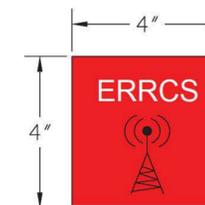
ERRCS DESIGN & FCC LICENSE

ERRCS DESIGN (FCC LICENSEE)

ERRCS LEAD INSTALLER (FCC LICENSEE)

SIGNAGE & KEY BOX STICKER

1. BUILDINGS EQUIPPED WITH AN ERRCS SYSTEM SHALL BE IDENTIFIED BY AN APPROVED SIGN LOCATED ABOVE OR NEAR THE BUILDING KNOX BOX STATING: "ERRCS" ALONG WITH ANTENNAE LOGO. THE SIGN SHALL BE A MINIMUM 4-INCH BY 4-INCH IN SIZE. THE LETTERS SHALL BE WHITE AND BE A MINIMUM OF 1-INCH HEIGHT. THE BACKGROUND SHALL BE RED.



THE EMERGENCY RESPONDER RADIO COVERAGE SYSTEM SIGNAGE TO BE LOCATED ABOVE OR NEAR BUILDING KNOX BOX.
SIGN TO BE:
4"x4" MINIMUM
RED BACKGROUND
LETTERS TO BE WHITE AT A MINIMUM OF 1" IN HEIGHT.

SEQUENCE OF OPERATIONS AT FACP

NOTES:

1. FACP - FIRE ALARM CONTROL PANEL.
2. THE SEQUENCE LISTED BELOW IS FOR THE FIRE ALARM MONITORING OF THE SYSTEM BY THE BUILDING FIRE ALARM PANEL.
3. THE ERRCS WILL BE CONNECTED TO THE FACP.

SYSTEM INPUTS	SYSTEM OUTPUTS					
	A	B	C	D	E	F
1. ERRCS NORMAL AC POWER	●	●			●	
2. ERRCS LOSS OF NORMAL AC POWER	●	●			●	
3. ERRCS UPS/BATTERY CHARGER FAILURE	●	●			●	
4. ERRCS LOW BATTERY CAPACITY (TO 70% DEPLETION)	●	●			●	
5. ERRCS DONOR ANTENNAE MALFUNCTION	●	●			●	
6. ERRCS ACTIVE RF EMITTING DEVICE MALFUNCTION	●	●			●	
7. ERRCS SYSTEM COMPONENT MALFUNCTION	●	●			●	

INDEX OF DRAWINGS

SHEET NUMBER	SHEET DESCRIPTION
ERRCS-0.0A	COVER SHEET
ERRCS-0.0B	CITY ERRCS REQUIREMENTS
ERRCS-0.1	INSTALLATION DETAILS
ERRCS-0.2	FIRE STOP DETAILS
ERRCS-0.3A	POWER PLAN
ERRCS-0.3B	ANTENNA MONITORING SYSTEM & BACKUP BATTERY WIRING DIAGRAM
ERRCS-0.4	RISER DIAGRAM
ERRCS-0.5	PROPAGATION MAPS
ERRCS-2.1	GROUND FLOOR PLAN
ERRCS-2.2	SECOND FLOOR PLAN
ERRCS-2.3	THIRD FLOOR PLAN
ERRCS-2.4	FOURTH FLOOR PLAN
ERRCS-2.5	FIFTH FLOOR PLAN
ERRCS-2.6	SIXTH FLOOR PLAN
ERRCS-2.7	ROOF PLAN

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF [REDACTED]

JOB: [REDACTED] PHASE: C.A.

SCALE: As indicated

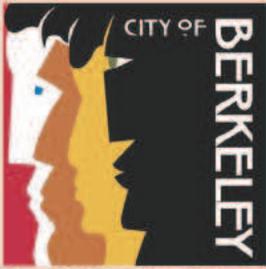
PHASE: C.A.

DATE: 9/22/2022 5:06:05 PM

DATE: 9/22/2022 5:06:05 PM

COVER SHEET

ERRCS-0.0A



FIRE PERMIT APPLICATION

CONSTRUCTION - EQUIPMENT INSTALLATION

Permit Service Center
Fire Prevention Division
Berkeley Fire Dept.

For online information on the permitting process and fire prevention information, please visit: <https://www.cityofberkeley.info/Fire/Home/FirePrevention.aspx>

Fire Permit #: [REDACTED]

Project Information:

Property Address: [REDACTED]

APN Number: [REDACTED]

Total Project Square Feet: 9,984

Number of Stories: 6

Project Valuation: 20,000

Project Summary:

Installation of Emergency Responder Radio Coverage System (ERRCS/I

Single Family Residential Multi-Family Residential Commercial

Owner Information:

Name: [REDACTED]

Address: [REDACTED]

City: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Applicant Information:

Name: [REDACTED]

Address: [REDACTED]

City: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Contractor Information:

Name: [REDACTED]

State Lic #: [REDACTED]

Address: [REDACTED]

City, State: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Associated Building Permit #: [REDACTED] (if any)

Permit Service Center
1947 Center St. 3rd floor
Berkeley, CA 94704
permits@cityofberkeley.info

Fire Inspectors:
510.981.5585
Fire Plans Examiner:
510.981.7447

FEES FOR FIRE PERMIT

Fee Item	Quantity	Unit	Fee/Unit	Sub-Total (Optional)
Minimum Fire Permit Fee includes:				
• Filing Fee	1	Each	\$22	
• Technology Fee	1	Each	5% total permit fee	
• Plan Check Fee	1	Each	\$392/hr	
• Inspection Fee	1	Each	\$392/hr	

EQUIPMENT INSTALLATION

Automatic Sprinkler		Each	\$392 min	
Extinguishing Systems		Each	\$392 min	
Minor Extinguishing Systems--Alt.		Each	\$196 min	
Underground Water Main		Each	\$392 min	
Fire Pump		Each	\$392 min	
Standpipe		Each	\$392 min	
Window Bars		Each	\$196	
High Pile Storage		Each	\$392 min	

FIRE ALARM SYSTEMS (REQUIRED)

0-12 Devices		Each	\$392	
13-30 Devices		Each	\$588	
31-49 Devices		Each	\$980	
50+ Devices		Each	\$1176 min	
Water Flow Alarms		Each	\$196	

TANKS

Additional Inspection plus Min.		Each	\$392/hr	
Remove/Change Flammables/Liquids		Each	\$196 ea	
Add Above/ Below Grade Tank < 4,000 gal.		Each	\$196 ea	
Add Above/ Below Grade Tank 4,000 - 8,000 gal.		Each	\$392 ea	
Add Above/ Below Grade Tank > 8,000 gal.		Each	\$588 ea	
Remove Above Grade Tank (per tank)		Each	\$196 ea	
Remove Below Grade Tank (per tank)		Each	\$392 ea	
Piping & Equipment		Each	\$196 ea	

Total:

--

FIRE ALARM SYSTEM & ELEVATOR LANDING 2-WAY EMERGENCY COMMUNICATION SYSTEM

MONITORING INFORMATION

ACCT # TO BE DETERMINED

SUPERVISORY STATION:
TO BE DETERMINED

GENERAL NOTES

- ALL REQUIREMENTS OF CONTRACT SPECIFICATIONS AND DRAWINGS APPLY.
- THE FIRE ALARM SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CITY OF BERKELEY FIRE DEPARTMENT REQUIREMENTS, NFPA 72, 2016 EDITION, AND OTHER APPLICABLE NFPA STANDARDS AS ADOPTED BY THE CITY/COUNTY.
- WIRING METHODS AND MATERIALS SHALL CONFORM WITH ALL APPLICABLE SECTIONS OF CEC ARTICLE 760 AND NFPA 72 2016.
- SEE NOTIFIER FIELD WIRING SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS.
- THE PRIMARY POWER SOURCE (120VAC 60 HZ INPUT POWER) FOR THE FIRE ALARM CONTROL PANEL (FACP) AND REMOTE POWER SUPPLIES SHALL BE FROM A DEDICATED CIRCUIT. THIS CIRCUIT SHALL BE LABELED AT BOTH THE ELECTRICAL SUB PANEL AND ON THE INSIDE OF THE FACP/POWER SUPPLY DOOR, AND BE PROVIDED WITH A CIRCUIT LOCK (IF IT IS NOT INSTALLED IN A LOCKED ROOM).
- A READILY VISIBLE SIGN MOUNTED ON THE EXTERIOR SIDE OF THE FACP ROOM DOOR SHALL IDENTIFY THE LOCATION OF THE FACP INDICATING: "FIRE ALARM CONTROL PANEL INSIDE". SEE DETAIL, SHT FA-03.
- ALL WIRING, INCLUDING SHIELDS, MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
- ONE COPY OF "AS BUILT" DRAWINGS SHALL BE STORED IN THE DOCUMENTATION CONTAINER (2016 NFPA 72, 7.7.2.2) AND SHALL BE ACCESSIBLE BY AUTHORIZED PERSONNEL ONLY (7.7.2.5). CABINET SHALL BE LOCKED & PROMINENTLY LABELED "SYSTEM RECORD DOCUMENTS" (7.7.2.4).
- 120VAC IS NOT PERMITTED IN SAME CONDUIT WITH LOW VOLTAGE WIRING.
- DO NOT APPLY POWER EXCEPT IN THE PRESENCE OF A FACTORY-TRAINED NOTIFIER TECHNICAL REPRESENTATIVE.
- ANY SMOKE DETECTOR HEAD INSTALLED BEFORE BUILDING IS CLEANED AND ACCEPTED SHALL BE COVERED TO PROTECT FROM DUST. ANY FALSE ALARMS DUE TO DIRT-CONTAMINATED HEADS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- THERE WILL BE NO CONDUIT ENTRY ALLOWED 18" OR LOWER ON THE SIDE PANELS OR THROUGH THE BOTTOM OF ALL CONTROL EQUIPMENT BACKBOXES.
- CONDUIT AND JUNCTION BOXES ARE DIAGRAMMATIC ONLY. EXACT LOCATION MAY VARY DUE TO FIELD CONDITIONS. ACTUAL INSTALLATION LOCATIONS SHALL BE DETERMINED BY THE INSTALLER CONTRACTOR.
- SIGNALING CIRCUIT WIRE RUNS ARE CRITICAL. ANY INCREASE IN LENGTH OF WIRE MAY EFFECT CIRCUIT CONFIGURATION.
- DO NOT LOCATE SMOKE DETECTORS WITHIN 3 FEET OF SUPPLY AND RETURN AIR VENTS.
- LOCAL FIRE AUTHORITY SHALL WITNESS FINAL TEST.
- VISIBLE NOTIFICATION APPLIANCES SHALL BE SYNCHRONIZED WHEN THERE ARE MORE THAN TWO VISIBLE NOTIFICATION APPLIANCES OR GROUPS OF APPLIANCES IN THE SAME ROOM OR ADJACENT SPACE WITHIN THE FIELD OF VIEW.
- ALL SINGLE STATION SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217, AND SHALL BE INTERCONNECTED SO THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL THE ALARMS IN THE INDIVIDUAL UNIT.
- CLASS A CIRCUITS TO BE USED WITH FAULT ISOLATION MODULES.
- ALL OUTDOOR EQUIPMENT SHALL BE LISTED FOR OUTDOOR USE OR ENCLOSED WITHIN A WEATHER RESISTANT ENCLOSURE.

SCOPE OF WORK

INSTALLATION OF A NEW AUTOMATIC AND MANUAL FIRE ALARM SYSTEM (PER NFPA 72 2016) & INSTALLATION OF A NEW ELEVATOR LANDING 2-WAY EMERGENCY COMMUNICATION SYSTEM (ECS) AS REQUIRED BY INTERNATIONAL BUILDING CODE (IBC), NATIONAL FIRE ALARM CODE (NFPA), & ADA AND ABA ACCESSIBILITY GUIDELINES (ADAAG).

THE FIRE ALARM SYSTEM COMPRISES INITIATING, NOTIFICATION AND SUPERVISORY DEVICES.

THE ELEVATOR LANDING 2-WAY ECS IS COMPRISED OF (7) CALL BOX LOCATIONS AND A CENTRAL CONTROL POINT LOCATION IN MAIN LOBBY, APPROVED BY THE FIRE DEPARTMENT.

ELEVATOR LANDING 2-WAY ECS MONITORED VIA THE APPROVED FIRE ALARM SYSTEM.

THIS SYSTEM IS A CENTRAL STATION SYSTEM, UTILIZING ONE POTS LINE AND ONE CELLULAR COMMUNICATION, AND IN COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

SEQUENCE OF OPERATION

SEQUENCE OF OPERATIONS	ANNUNCIATE ALARM CONDITION @	ANNUNCIATE TROUBLE CONDITION @	ANNUNCIATE SUPERVISORY CONDITION @	ANNUNCIATE ALARM CONDITION @	ANNUNCIATE TROUBLE CONDITION @	ANNUNCIATE SUPERVISORY CONDITION @	ACTIVATE ALL AUDIO/VISUAL DEVICES	ACTIVATE ALL LOW FREQUENCY SOUNDERS	ACTIVATE AUDIO/VISUAL DEVICES IN FUTURE ADA ROOM	CLOSES ALL FIRE/SMOKE DAMPERS	RECALL ELEV TO DESIGNATED (1ST) FLOOR	RECALL ELEV TO ALTERNATE (2ND) FLOOR	RELEASE DOOR HOLDERS, ALL FLOORS	ACTIVATE FIREFIGHTER HAT RELAY	ACTIVATE SHUNT TRIP	ACTIVATE EXTERIOR BELL	SEND ALARM SIGNAL TO MONITORING STATION	SEND TROUBLE SIGNAL TO MONITORING STATION	SEND SUPERVISORY SIGNAL TO MONITORING STATION
	FACP	FACP	@ FACP	REMOTE ANNUNCIATOR	REMOTE ANNUNCIATOR	@ REMOTE ANNUNCIATOR													
ALARM	FIRE ALARM PULL STATIONS	X		X			X	X	X								X		
	AREA SMOKE DETECTORS	X		X			X	X	X								X		
	SMOKE DETECTOR ELEV LANDING, LEVEL 1	X		X			X	X	X				X				X		
	SMOKE DETECTOR ELEV LANDING, LEVELS 2-6	X		X			X	X	X		X						X		
	SMOKE DETECTOR ELEVATOR EQUIP RM	X		X			X	X	X		X		X	X			X		
	FIRE SPRINKLER ELEVATOR HOISTWAY															X			
	HEAT DETECTOR TRASH/BOILER	X		X			X	X	X		X		X	X			X		
	WATER FLOW SWITCH	X		X			X	X	X							X	X		
TROUBLE	PANEL/SYSTEM/DEVICE/CIRCUIT TROUBLE/GROUND FAULT		X		X														X
	BACKUP BATTERY FAILURE		X		X														X
	REMOTE BOOSTER POWER SUPPLY		X		X														X
	2-WAY COMM, POWER		X		X														X
	ERRCS, NORMAL AC POWER		X		X														X
	ERRCS, NORMAL AC POWER LOSS		X		X														X
	ERRCS, UPS FAILURE		X		X														X
	ERRCS, LOW BATTERY (70% depletion)		X		X														X
	ERRCS, DONOR ANTENNAE ERROR		X		X														X
	ERRCS, RF DEVICE FAILURE		X		X														X
	ERRCS, SYSTEM COMPONENT FAIL		X		X														X
	CELL COMM. INPUT/OUTPUT		X		X														X
SUPERVISORY	FIRE/SMOKE DAMPERS			X		X				X									X
	SMOKE DUCT DETECTORS			X		X				X									X
	ADA (FUTURE) SMOKE DETECTOR			X		X			X										X
	TAMPER SWITCH			X		X													X
	PIV SWITCH			X		X													X
	SMOKE DETECTORS-DOOR RELEASE			X		X													X

NOTE 1 - MONITORED WITH POINT-ID. DEVICE DESCRIPTION AND LOCATION WILL BE SENT TO MONITORING STATION. SEE FA0.4 FOR DEVICE ADDRESS & LOCATION LIST.
NOTE 2 - HORN SHALL BE SET TO THREE-PULSE TEMPORAL PATTERN.
* VISUAL SIGNAL (FIRE FIGHTER HAT) INSIDE ELEVATOR CAR SHALL COMPLY WITH ASME A17.1-2011 (SOLID OR FLASHING)

APPVL

BERKELEY FIRE DEPARTMENT
DIVISION OF FIRE PREVENTION
APPROVED
SUBJECT TO FIELD INSPECTION

- APPROVED with Conditions as Noted Below:**
- The following tests will be included in the acceptance test (at the discretion of the Fire Inspector):
 - 24-hour standby battery test
 - End-of-line voltage test
 - 100% test of all new initiating devices
 - Ensure the door to the electrical room containing the Fire Alarm Control Panel shall be provided with a sign indicating "Fire Alarm Control Panel Inside".
 - The fire alarm shall be tested before calling for final inspection.
 - Provide to the fire department with copies of the results.

BUILDING INFORMATION

BUILDING HAS FULL SPRINKLER SYSTEM AS PER NFPA13. AREAS OF REFUGE NOT REQUIRED PER CBC 1007.3 EXCEPTION 3.

Building Area Limitation (Separated Occupancies)			
Occupancy per Level	Type	Proposed Area	SF
LEVEL 1 (S-2, R-2, B-2)	IA		4,255
LEVEL 2 (R-2)	III-A		10,783
LEVEL 3 (R-2)	III-A		10,783
LEVEL 4 (R-2)	III-A		10,783
LEVEL 5 (R-2)	III-A		10,783
LEVEL 6 (R-2)	III-A		8,688
Building Floor Area Total			56,075

BUILDING HEIGHT: 6 STOREYS ABOVE GROUND LEVEL
NUMBER OF BUILDINGS: 1
ACTUAL BUILDING HEIGHT 69'-0" ABOVE GRADE PLANE

CODES

APPLICABLE CODES:

2016 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

2016 CALIFORNIA BUILDING CODE PART 2, TITLE 24, CCR (2012 IBC)

2016 CALIFORNIA ELECTRICAL CODE PART 3, TITLE 24, CCR (2011 NEC)

2016 CALIFORNIA MECHANICAL CODE PART 4, TITLE 24, CCR (2012 UMC)

2016 CALIFORNIA FIRE CODE PART 9, TITLE 24, CCR (2012 IFC)

APPLICABLE STANDARDS:

2016 NATIONAL FIRE ALARM AND SIGNALING CODE (NFPA 72)

AMERICAN WITH DISABILITIES ACT (ADA)

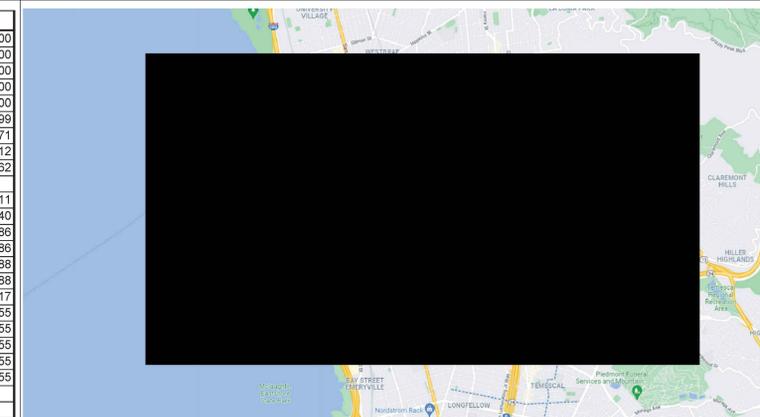
SHEET INDEX

- FA0.0 TITLE SHEET
- FA0.1 STANDARD NOTES
- FA0.2 WIRING & MISC
- FA0.3 DEVICE DETAILS
- FA0.4 VOLTAGE DROPS & CALCS
- FA0.5 RISER DIAGRAM
- FA0.6 ADA ADAPTABILITY
- FA2.0 FIRE ALARM - LEVEL 1
- FA2.1 FIRE ALARM - LEVEL 2
- FA2.2 FIRE ALARM - LEVEL 3
- FA2.3 FIRE ALARM - LEVEL 4
- FA2.4 FIRE ALARM - LEVEL 5
- FA2.5 FIRE ALARM - LEVEL 6
- FA2.6 FIRE ALARM - ROOF LEVEL
- EC3.0 2-WAY COMM, DETAILS & NOTES
- EC3.1 2-WAY COMM, SPEC SHEETS

SYMBOLS LIST

SYMBOL	QTY	PART #	DESCRIPTION	CSFM #
[FACP]	1	SK6820	FACU-CPU	7165-0559-0500
		INCL	80 CHARACTER DISPLAY WITH KEYPAD	7165-0559-0500
		INCL	DRESS PLATE FOR DISPLAY	7165-0559-0500
		INCL	BLACK DRESS PLATE	7165-0559-0500
[FAA]	1	SK5860	LCD ANNUNCIATOR	7165-0559-0500
		IPGSM-4G	UNIVERSAL DIGITAL ALARM COMM TRANSMITTER	7300-1645-0199
[FCPS]	5	FCPS-5496	REMOTE POWER SUPPLY W/BATT CHGR	7165-0559-0171
[SKPHOTO]	50	SKPHOTO	SMOKE DETECTOR/BASE INCLUDED	7272-0559-0512
[BY OTHERS]	1	BY OTHERS	DUCT SMOKE DETECTOR, PHOTO	3242-0559-0162
[DOOR HOLDER]	15	BY OTHERS	DOOR HOLDER	-
[SKHEAT]	2	SKHEAT	HEAT DETECTOR/BASE INCLUDED	7270-0559-0511
[SKPULLSA]	25	SKPULLSA	ADDRESSABLE PULL STATION	7150-0559-0140
[SR]	0	SR	MULTI-CANDELA STROBE ONLY, WALL	7125-1653-0186
[SR WP]	0	SRK	MULTI-CANDELA STROBE ONLY, WALL WP	7125-1653-0186
[SCR]	24	SCR	MULTI-CANDELA STROBE ONLY, CEILING	7125-1653-0188
[PC2R]	16	PC2R	MULTI-CANDELA HORN/STROBE, CEILING	7125-1653-0188
[P2RK WP]	3	P2RK	MULTI-CANDELA HORN/STROBE, WALL, WP	7125-1653-0517
[HWLF]	86	HWLF	LOW FREQUENCY SOUNDER	7300-0559-0155
[SKC]	0	SK-CONTROL	CONTROL MODULE	7300-0559-0155
[SK2]	9	SK-MONITOR2	DUAL MONITOR MODULE	7300-0559-0155
[SK1]	4	SK-MONITOR	ADDRESSABLE STD MODULE	7300-0559-0155
[SKR]	15	SK-RELAY	REMOTE CONTROL MODULE	7300-0559-0155
[BY OTHERS]	11	BY OTHERS	TAMPER SWITCH	-
[BY OTHERS]	7	BY OTHERS	FLOW SWITCH	-
[BY OTHERS]	16	BY OTHERS	END OF LINE RESISTER	-
[BY OTHERS]	32	BY OTHERS	ISOLATION MODULES	-

AREA AND VICINITY MAPS



ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ELECTRICAL CONTRACTOR AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF S.J. CIMINO ELECTRIC.

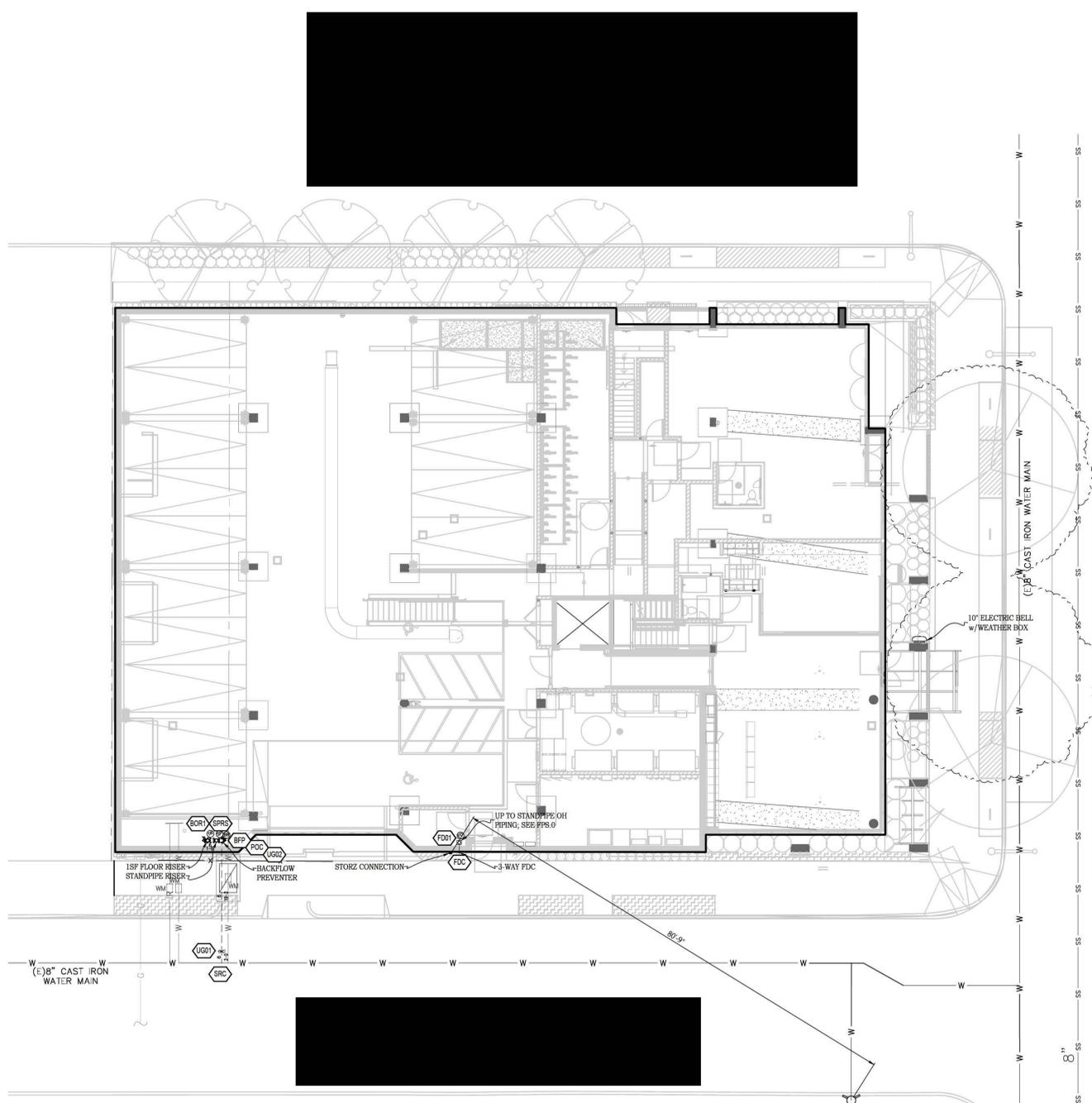
JOB: AQUATIC VI DRAWN BY: EAL
SCALE: AS INDICATED DATE: 03.14.2022

SHEET:

FIRE ALARM TITLE SHEET

FA0.0





- NOTE: 1. FIRE SERVICE UNDERGROUND SHOWN FOR REFERENCE ONLY & APPROVED UNDER SEPARATE PERMIT
 2. ALL ELECTRICAL BY OTHERS
 3. ALARM BELL SHALL BE ON EXTERIOR OF BUILDING ADJACENT TO FRONT LOBBY ON STREET FRONTAGE OF BUILDING.

1 SITE PLAN

SCALE: 1"=10'-0"



NOTE: COPY OF EBMUD WATER FLOW PROVIDED WITH CALCS

2 WATER FLOW INFO

SCALE: N.T.S.

Sheet List Table

Sheet Number	Sheet Title
FP0.0	SITE PLAN & NOTES
FP0.1A	SEISMIC INFO
FP0.1B	SEISMIC INFO CPVC
FP0.2	DETAILS
FP0.3	TJI DETAILS
FP0.4	BLDG SECTION & RATED PENETRATIONS
FP1.0	GROUND FLOOR OH PIPING & RCP
FP1.1	CAR STACKER PIPING
FP2.0	2ND FLOOR OH PIPING & RCP
FP3.0	3RD FLOOR OH PIPING & RCP
FP4.0	4TH FLOOR OH PIPING & RCP
FP5.0	5TH FLOOR OH PIPING & RCP
FP6.0	6TH FLOOR OH PIPING & RCP
FPR.0	ROOF OH PIPING & RCP
FPS.0	GROUND & 2ND FLOOR STANDPIPE PIPING
FPS.1	3RD & 4TH FLOOR STANDPIPE PIPING
FPS.2	5TH & 6TH FLOOR STANDPIPE PIPING
FPS.3	ROOF STANDPIPE PIPING
FPS1.0	STAIR 1 STANDPIPE
FPS2.0	STAIR 2 COMBO STANDPIPE

3 SHEET LIST TABLE

SCALE: N.T.S.

* ABBREVIATIONS *

A.T.R.	ALL THREAD ROD	LINTL.	LINTEL
@	ABOVE	LIV.	LIVING ROOM
ABV.	ABOVE	LNDG.	LANDING
BATH	BATHROOM	LNDRY.	LAUNDRY ROOM
BED.	BEDROOM	MAINT.	MAINTENANCE
BLK.	BLOCK	MAX.	MAXIMUM
BFF.	BACKFLOW PREVENTER	M.BD.	MASTER BEDROOM
B.O.R.	BASE OF RISER	M.BATH	MASTER BATH
BLKG.	BLOCKING	MECH.	MECHANICAL
BLDG.	BUILDING	MIN.	MINIMUM
CAB.	CABINET	MISC.	MISCELLANEOUS
CALCS	CALCULATION(S)	(N)	NEW
CFC	CA FIRE CODE	NEC.	NECESSARY
C.J.	CEILING JOINT	NOM.	NOMINAL
CLG.	CEILING	N.T.S.	NOT TO SCALE
CL.	CENTER LINE	O.C.	ON CENTER
CL.O.	CLOSE	O.H.	ORDINARY HAZARD
CLR.	CLEAR	ORF.	ORIFICE
COL.	COLUMN	ORIG.	ORIGINAL
DEG.	DEGREE	PDR.	POWDER ROOM
DIA.	DIAMETER	P.L.	PROPERTY LINE
DIM.	DIMENSION	P.O.C.	POINT OF CONNECTION
DIN.	DINING ROOM	PROJ.	PROJECT
DN.	DOWN	P.S.I.	POUNDS PER SQUARE INCH
D.W.	DISHWASHER	QTY.	QUANTITY
DWG.	DRAWING	RA	REMOTE AREA
(E)	EXISTING	RCP	REFLECTED CEILING PLAN
ELEC.	ELECTRIC	RDCG	REDUCING
ELEV.	ELEVATION	REF.	REFERENCE
ELL.	ELBOW	REF.	REFRIGERATOR
ENT.	ENTRANCE	REQD.	REQUIRED
EQ.	EQUAL EQUIVALENT	REV.	REVISE
EQ.	EARTHQUAKE	RM.	ROOM
EQUIP.	EQUIPMENT	RTD.	RATED
EX	EXAMPLE	SCH.	SCHEDULE
EXT.	EXTERIOR	SECT.	SECTION
FAU.	FORCED AIR UNIT	SERV.	SERVICE
FC	FLEXIBLE COUPLING	SF	SQUARE FOOTAGE
FDC	FIRE DEPT. CONNECTION	SIM.	SIMILAR
FH	FIRE HYDRANT	SPEC.	SPECIFICATION
FIG.	FIGURE	SQ.	SQUARE
FLEX.	FLEXIBLE	S.S.	STAINLESS STEEL
FT.	FEET / FOOT	ST.	STREET
F.F.	FINISH FLOOR	STD.	STANDARD
FURN.	FURNACE	STL.	STEEL
GEN.	GENERAL	STOR.	STORAGE
G.L.B.	GLUE LAM BEAM	STRUC.	STRUCTURAL
GOVT.	GOVERNMENT	SYM	SYMBOL
GPM	GALLONS PER MINUTE	SYS	SYSTEM(S)
GRVD.	GROOVED	TEMP	TEMPERATURE
GYP.	GYPSON	THR.	THREADED
GYP.BD.	GYPSON BOARD	THRU.	THROUGH
HDCP.	HANDICAPPED	T.O.R.	TOP OF RISER
HVAC	HEAT & AIR CONDITIONING	TYP.	TYPICAL
HT.VHGT.	HEIGHT	U.O.N.	UNLESS OTHERWISE NOTED
HR.	HOUR	UTIL.	UTILITIES
HYD.	HYDRANT	V.I.F.	VERIFY IN FIELD
IN.	INCH	W.	WITH
INCL.	INCLUDE	W/O	WITHOUT

* GENERAL NOTES *

- ALL MATERIALS AND METHODS SHALL COMFORM TO THE REQUIREMENTS OF NFPA 13 (2016) AND BERKELEY FIRE PREVENTION.
- THE SYSTEM HAS BEEN HYDRAULICALLY CALCULATED PER THE DESIGN CRITERIA ABOVE. SEE PRINTED CALCULATION REPORT FOR DETAILS. A PLACARD INDICATING THE HYDRAULIC DESIGN CRITERIA WILL BE INSTALLED ON THE RISER.
- ALL MATERIALS TO BE NEW AND APPROVED.
- OBTAIN STRUCTURAL ENGINEER'S APPROVAL BEFORE DRILLING ANY BEAMS.
- ALL DIMENSIONS ARE +/- AND ARE A GUIDE FOR INSTALLATION ONLY.
- ALL CEILING HEIGHTS ARE NOTED.
- ALL PIPE SIZES NOTED ON PLANS.
- ALL ATTIC SPRIGS TO BE CPVC.
- ALL PIPING SHALL BE HYDROSTATICALLY TESTED PER NFPA 13 (2016), SEC. 10.10.2.2.1, FOR 2 HOURS.
- A SPARE HD CABINET, SPRINKLERS, AND WRENCHES SHALL BE PROVIDED PER NFPA 13 (2016) SEC. 6.2.9.
- PROTECTION AGAINST FREEZING OF ALL EXPOSED PIPING, SPRINKLERS, AND VALVES IS THE RESPONSIBILITY OF THE OWNER (MAINTAIN 40 DEG. MIN. TO ALL PIPES & VALVES AT ALL TIMES) & SHALL ADHERE TO NFPA 13 (2016) SEC. 8.16.4.1.
- EXTERIOR ALARM BELL SHALL BE PROVIDED BY THORPE DESIG. INSTALLATION & WIRING BY OTHERS.
- THE SYSTEM ALARM SHALL BE PROVIDED WITH 24-HOUR MONITORING PER CFC.
- 18-INCH CLEARANCE ABOVE STORAGE IS REQUIRED PER NFPA 13 (2016).
- WATER INFORMATION: STATIC 71 PSI RESIDUAL 70 PSI FLOW 750 PROVIDED BY EBMUD (USE FOR DESIGN: STATIC 71 PSI RESIDUAL 70 PSI FLOW 750 GPM)

* FIRE SPRINKLER DESIGN CRITERIA *

AUTHORITY HAVING JURISDICTION: BERKELEY FIRE PREVENTION
 STANDARD: NFPA 13 (2016)
 SYSTEM TYPE: WET
 DENSITY: 0.10 (LH-ATTIC & RES.) / 0.15 (ORD. GRP. 1-GARAGE)
 AREA OF APPLICATION: SEE REMOTE AREA INFO. ON O.H. PIPING PLANS (RESIDENTIAL FLOORS - 8 SPRINKLER HEADS)
 HOSE ALLOWANCE: 100 GPM (LH) / 250 GPM (ORD. GRP.)
 SCOPE OF WORK: THORPE DESIGN IS TO INSTALL A NEW FIRE SPRINKLER SYSTEM & STANDPIPE.
 FACILITY USAGE: RESIDENTIAL

* CPVC PIPING NOTES *

- CPVC MAY BE RUN IN JOIST SPACES BETWEEN GYP. BOARD AND FLOOR PLY WITHOUT ADDED PROTECTION.
- CPVC RUN IN UNSPRINKLERED AREAS SHALL BE COVERED OVER WITH COMMON INSULATION.
- BRANCH LINES SHALL BE BRACED AT A DISTANCE OF SIX INCHES OR LESS FROM THE TEE OR ELBOW DROP TO THE SPRINKLER HEAD.
- THE PIPE HANGER MUST HAVE A LOAD BEARING SURFACE AT LEAST 1/2 INCH WIDE OR PROVIDE SUPPORT IN TWO PLACES, SUCH AS A WRAP AROUND U-HANGER.
- SPACING REQUIREMENTS OF SPRINKLERS IN HEAT ZONES:

MINIMUM DISTANCE	OBJECT
0-6	WATER HEATER
1-0	UNINSULATED PIPE
1-6	OVEN AND STOVE
2-0	CEILING DIFFUSER
5-0	FIREPLACE FRONT
3-0	FIREPLACE SIDE
1-6	UNINSULATED HEAT DUCT
1-6	WATER HEATER OR FURNACE FLUE

* STEEL PIPING NOTES *

- STEEL PIPING SHALL BE:
 1'-2" PIPE - MEGATHREAD (GROOVED AND/OR THREADED)
 1 1/2'-6" PIPE - MEGAFLOW (MUST BE GROOVED; CANNOT BE THREADED)
- PIPE FITTINGS:
 1'-2" PIPE - DUCTILE IRON, CAST IRON, 300#, AND GROOVED WITH STANDARD GASKETS.
 1 1/2'-6" PIPE - DUCTILE IRON, GROOVED WITH STANDARD GASKETS.
- SHOP WELDED GASKETS INSTALLED BY CERTIFIED WELDERS.
- FOREMAN TO SCHEDULE WELD INSPECTION.

* WELDED PIPE AND FITTINGS *

- EACH PIPE-WELDING PACKAGE FOR EACH BUILDING SHALL HAVE THE FOLLOWING INFORMATION DELIVERED AS PART OF THE PIPING PACKAGE.
- PROVIDE DOCUMENTATION FOR THE SHOP-PERFORMING THE WELDING.
- PROVIDE CERTIFICATION FOR ALL PERSONNEL DOING THE WELDING.
- PROVIDE CERTIFICATION FOR ALL MACHINERY BEING USED TO DO THE WELDING.
- PIPING MATERIAL SHALL BE MARKED AND MEET THE GUIDELINES AND REQUIREMENTS SET IN NFPA 13 (2016) SEC. 6.5.2.

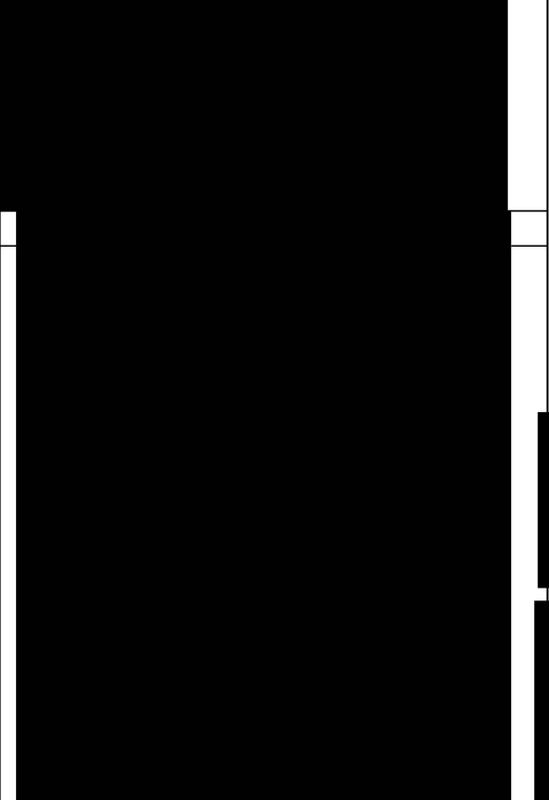
* PROJECT DESCRIPTION *

CONSTRUCTION OF NEW 6-STORY MIXED-USE BUILDING WITH 78-DWELLING UNITS, GROUND LEVEL LOBBIES, PARKING AND SHELL-ONLY COMMERCIAL, WITH STATE OF CALIFORNIA DENSITY BONUS.

* BUILDING CODES *

- FIRE SERVICE: THE DESIGN AND INSTALLATION FOR THE FIRE SPRINKLER UNDERGROUND PIPING AND ASSOCIATED WORK SHALL BE IN ACCORDANCE WITH NFPA 13 AND NFPA 24, 2016 EDITION. (SHOWN FOR REFERENCE ONLY)
- FIRE SPRINKLER SYSTEM: THE DESIGN AND INSTALLATION OF THE FIRE SPRINKLER SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 13, 2016 EDITION. THE MECHANICAL PARKING LIFTS/CAR STACKERS MUST BE DESIGNED AS ORDINARY HAZARD GROUP-1 WITH ALL LEVELS FLOWING SIMULTANEOUSLY.
- STANDPIPE SYSTEM AND HOSE CONNECTIONS: THE DESIGN AND INSTALLATION OF THE STANDPIPE SYSTEM AND HOSE CONNECTIONS SHALL BE IN ACCORDANCE WITH NFPA 14, 2016 EDITION.
- A TEMPORARY STANDPIPE WITH FDC SHALL BE PROVIDED PRIOR TO CONSTRUCTION EXCEEDING 40-FEET IN HEIGHT ABOVE THE LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS. CFC §3313.1

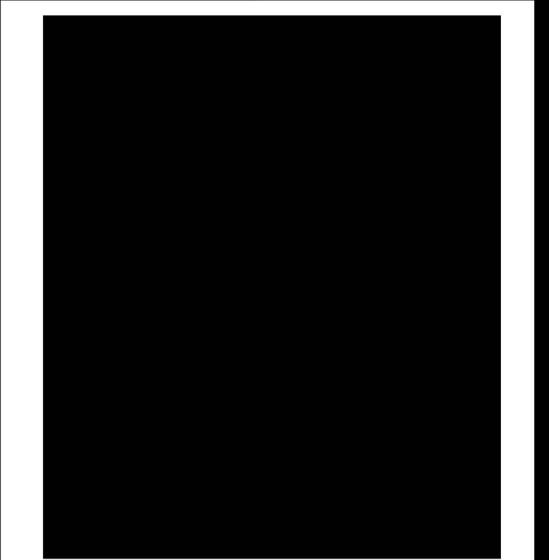
* PROJECT DATA *



* SPRINKLER TOTALS *

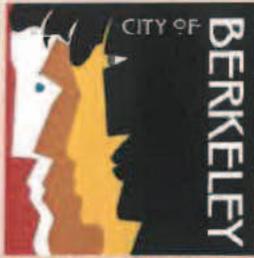
FLOOR	AREA (SF)	SYSTEM	HEADS
GROUND FLOOR	11,601 SF	1 - FIRE SPRINKLER SYSTEM	152 SPRINKLER HEADS
SECOND FLOOR	11,070 SF	1 - FIRE SPRINKLER SYSTEM	123 SPRINKLER HEADS
THIRD FLOOR	11,070 SF	1 - FIRE SPRINKLER SYSTEM	123 SPRINKLER HEADS
FOURTH FLOOR	11,070 SF	1 - FIRE SPRINKLER SYSTEM	123 SPRINKLER HEADS
FIFTH FLOOR	11,070 SF	1 - FIRE SPRINKLER SYSTEM	123 SPRINKLER HEADS
SIX FLOOR	9,328 SF	1 - FIRE SPRINKLER SYSTEM	110 SPRINKLER HEADS
TOTAL	65,209 SF	6 - FIRE SPRINKLER SYSTEM	754 SPRINKLER HEADS

* VICINITY MAP *



NO.	DATE	BY	REVISION
1	03/23/23 JM		PLAN CHECK COMMENTS
2	04/07/23 JM		PLAN CHECK COMMENTS
3	04/20/23 JM		AS-BUILT

* FITTER NOTES *
 INSTALLATION SHALL COMPLY WITH NFPA 13 AND BERKELEY FIRE DEPARTMENT. PLANS ARE GUIDE-LINES, FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. PROVIDE MARKED UP AS-BUILT PLANS AS NECESSARY.



FIRE PERMIT APPLICATION

CONSTRUCTION - EQUIPMENT INSTALLATION

Permit Service Center
Fire Prevention Division
Berkeley Fire Dept.

For online information on the permitting process and fire prevention information, please visit: <https://www.cityofberkeley.info/Fire/Home/FirePrevention.aspx>

Fire Permit #: [Redacted]

Project Information:

Property Address: [Redacted]

APN Number: [Redacted]

Total Project Square Feet: 56,075 Number of Stories: 6-story

Project Valuation: 40,000

Project Summary: F&I central station fire alarm & 2-way comm system new construction

Single Family Residential Multi-Family Residential Commercial

Owner Information:

Name: [Redacted]
Address: [Redacted]
City: [Redacted]
Phone: [Redacted]
Email: [Redacted]

Applicant Information:

Name: [Redacted]
Address: [Redacted]
City: [Redacted]
Phone: [Redacted]
Email: [Redacted]

Contractor Information:

Name: [Redacted]
State Lic #: [Redacted]
Address: [Redacted]
City, State: [Redacted]
Phone: [Redacted]
Email: [Redacted]

Associated Building Permit #: [Redacted] (if any)

Permit Service Center
1947 Center St. 3rd floor
Berkeley, CA 94704
permits@cityofberkeley.info

Fire Inspectors:
510.981.5585
Fire Plans Examiner:
510.981.7447

FEES FOR FIRE PERMIT

Fee Item	Quantity	Unit	Fee/Unit	Sub-Total (Optional)
Minimum Fire Permit Fee includes:				
• Filing Fee	1	Each	\$22	
• Technology Fee	1	Each	5% total permit fee	
• Plan Check Fee	1	Each	\$392/hr	
• Inspection Fee	1	Each	\$392/hr	

EQUIPMENT INSTALLATION

Automatic Sprinkler	<input type="text"/>	Each	\$392 min	<input type="text"/>
Extinguishing Systems	<input type="text"/>	Each	\$392 min	<input type="text"/>
Minor Extinguishing Systems--Alt.	<input type="text"/>	Each	\$196 min	<input type="text"/>
Underground Water Main	<input type="text"/>	Each	\$392 min	<input type="text"/>
Fire Pump	<input type="text"/>	Each	\$392 min	<input type="text"/>
Standpipe	<input type="text"/>	Each	\$392 min	<input type="text"/>
Window Bars	<input type="text"/>	Each	\$196	<input type="text"/>
High Pile Storage	<input type="text"/>	Each	\$392 min	<input type="text"/>

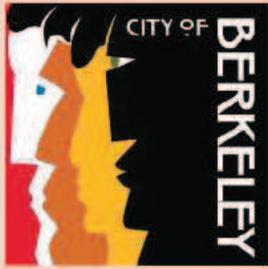
FIRE ALARM SYSTEMS (REQUIRED)

0-12 Devices	<input type="text"/>	Each	\$392	<input type="text"/>
13-30 Devices	<input type="text"/>	Each	\$588	<input type="text"/>
31-49 Devices	<input type="text"/>	Each	\$980	<input type="text"/>
50+ Devices	<input type="text"/>	Each	\$1176 min	<input type="text"/>
Water Flow Alarms	<input type="text"/>	Each	\$196	<input type="text"/>

TANKS

Additional Inspection plus Min.	<input type="text"/>	Each	\$392/hr	<input type="text"/>
Remove/Change Flammables/Liquids	<input type="text"/>	Each	\$196 ea	<input type="text"/>
Add Above/ Below Grade Tank < 4,000 gal.	<input type="text"/>	Each	\$196 ea	<input type="text"/>
Add Above/ Below Grade Tank 4,000 - 8,000 gal.	<input type="text"/>	Each	\$392 ea	<input type="text"/>
Add Above/ Below Grade Tank > 8,000 gal.	<input type="text"/>	Each	\$588 ea	<input type="text"/>
Remove Above Grade Tank (per tank)	<input type="text"/>	Each	\$196 ea	<input type="text"/>
Remove Below Grade Tank (per tank)	<input type="text"/>	Each	\$392 ea	<input type="text"/>
Piping & Equipment	<input type="text"/>	Each	\$196 ea	<input type="text"/>

Total:



**Public Works
Engineering**

A dimensioned schematic site plan must be completed with this application.

The Base Permit Fee will be applied to each permit type, except for Construction Parking.

Staging or storage of materials must be on private property or authorized by a Temporary Right of Way permit.

Permit Service Center
1947 Center St. 3rd floor
Berkeley, CA 94704
510-981-7500 TTY 6903
[permits](#)
[@cityofberkeley.info](#)

ENGINEERING PERMIT APPLICATION

Project Information

Permit #: [Redacted]

Address: [Redacted] Berkeley CA 94702

Owner Information

Name: [Redacted]

Address: [Redacted]

Email: [Redacted]

Applicant / Contractor Information

Name: [Redacted]

Company: [Redacted]

State Lic #: [Redacted]

Address: [Redacted]

Email: [Redacted]

Description of Work

Construction of new 6 story mixed-use building with 78 dwelling units, ground level lobby, parking and commercial spaces.

Engineering Permit Fees

Fee Item	Fee	Fee Code	Quantity
Minimum Engineering Permit Fee includes:			
• Filing Fee	\$22	FP230	<input type="text"/>
• Base Permit Fee	\$127	FP100	<input type="text"/>
• Technology Fee	5% of total	FP420	<input type="text"/>
• Refundable Deposit (as required)	\$1,376	FP110	<input type="text"/>
• Plan Check Fee (as required by Engineering)	\$190	FP1000	<input type="text"/>
Concrete Area			
Curb Gutter per 10 Lin Ft	\$28	FP150	<input type="text"/>
Flatwork per 100 Sq Ft	\$28	FP140	<input type="text"/>
Sanitary Sewer			
Sidewalk Inspection (up to curb)	\$190	FP440	<input type="text"/>
Upper Lateral Trench Sewer Inspection	\$190	FP450	<input type="text"/>
Sewer/Storm			
Storm Drain Lateral, Street Inspection	\$190	FP410	<input type="text"/>
Trench Inspection (Roadway)	\$190	FP130	<input type="text"/>
Storm Drain Lateral - Sidewalk Inspection	\$190	FP400	<input type="text"/>
Construction Parking			
Base Permit Fee	\$34	FP160	<input type="text"/>
No Parking Sign	\$15	FP170	<input type="text"/>
Time Zone/ Metered Area (daily)	\$15.80	FP190	<input type="text"/>
Time Zone/ Metered Area (weekly)	\$79.00	FP180	<input type="text"/>
Replace previous issued sign/cab card	\$5	FP171	<input type="text"/>
Temporary Right of Way Use			
Temporary ROW Inspection Fee	\$190	FP430	<input type="text"/>
Monthly Fee	\$221	FP250	<input type="text"/>
_____ Curb LF x _____ mo.	\$7.50	FP 260	<input type="text"/>
Debris Box/ Moving Containers/ PODS	\$100.00	FP270	<input type="text"/>
Miscellaneous			
Miscellaneous Excavation or Construction Inspection	\$190	FP200	<input type="text"/>
Electrical Inspection Fee	\$153	FP210	<input type="text"/>

Schematic Site Plan for Engineering Permit

Permit #:

Address: Berkeley Ca 94702

Description of Work:

Construction of new 6 story mixed-use building with 78 dwelling units, ground level lobby, parking and commercial spaces.

Contractor Information

Name:

Phone #:

Address:

City, ST, Zip:

See attached plans

Phase I TCP - Demo

Phase II TCP - Crane/hoist on

Phase III TCP - Concrete pumping from

Phase IV TCP - Utility work on

Phase V TCP - Typical construction plan with sidewalk closure on

No parking signs for

Bus stop relocation (bus stop has already been moved by AC Transit)

Haul Routes

Associated Building Permit #: