



January 28, 2026

Supervisor Stephen Sherrill
Supervisor Danny Sauter
Board of Supervisors
City and County of San Francisco

Re: Response to Letter of Inquiry – Feasibility of Implementing San Francisco Fire Code §1103.5.4

Dear Supervisors Sherrill and Sauter,

Thank you for your December 16, 2025, letter requesting information regarding the feasibility of implementing the high-rise residential sprinkler retrofit mandate under San Francisco Fire Code §1103.5.4, and the ability of the San Francisco Public Utilities Commission (SFPUC) water system to support those requirements.

SFPUC appreciates the opportunity to provide preliminary information regarding water supply and distribution considerations associated with sprinkler retrofits at existing residential high-rise buildings. As described below, this response is preliminary and based on currently available system-level data. SFPUC has not received sprinkler applications, detailed design drawings, or building-specific fire flow calculations for the buildings identified.

We are unable to fully answer many of the specific questions in your letter without additional, project-specific information. Before getting into the individual responses, we thought it would be helpful to outline the sprinkler service application process.

An applicant for new fire sprinkler service would follow these steps:

1. Water Flow Field Testing

First, the applicant coordinates with the San Francisco Fire Department (SFFD) to request a water flow field test. The results of this test are provided to the permit applicant and are used by their design team to size and design the automatic fire sprinkler system. [Request water flow information | SF.gov](#)

2. Sprinkler Permit Application and Plan Check

The property owner or permit applicant submits a sprinkler permit application to the San Francisco Fire Department through the Permit Center plan check process. [Plan Check | SF Fire Website](#)

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3. Fire Service Size Approval by SFFD

SFFD reviews and approves the proposed underground fire sprinkler service size during the sprinkler permit review process, which may be eligible for over-the-counter approval depending on the project scope.

4. Transmittal of Approval to SFPUC

Following approval, SFFD transmits the approved fire service size and related information to the SFPUC New Installations group.

5. SFPUC Fire Service Application

Separately from the Permit Center process, the permit applicant must submit a New Water Service Installation Application to SFPUC for the fire service connection, in accordance with SFPUC water service installation requirements. [Fire Service Connections](#)

6. SFPUC Hydraulic Analysis and System Review

As part of its review, SFPUC evaluates available system capacity using hydraulic analysis and other system data to assess whether the proposed fire service can be reliably supported under existing conditions. This analysis considers factors such as pressure zone characteristics, available fire flow, residual pressure, and potential impacts of simultaneous demand. Where necessary, SFPUC may require additional information, modeling, or coordination to evaluate system adequacy.

7. SFPUC Final Determination and Implementation

Based on the hydraulic analysis and project-specific information, SFPUC determines the appropriate service configuration and whether on-site or off-site infrastructure upgrades are required. If existing water distribution system pressures and flow are inadequate, the project sponsor will be responsible for system improvements required to meet the project's demands.

As outlined above, the initial steps in the process are handled between SFFD and project sponsors. SFPUC cannot provide a more in-depth analysis without project-specific information.

Preliminary Building-Level “Yes / No” Assessment

For purposes of this preliminary screening, SFPUC reviewed available GIS information regarding adjacent water main size and configuration. This review does not evaluate building-specific sprinkler demand or fire flow requirements. As a result, SFPUC cannot make definitive “yes” or “no” determinations regarding the need for infrastructure upgrades at this stage.

Instead, the preliminary screening categorizes addresses based on general indicators, such as water main size and configuration, to identify locations that may warrant further evaluation once project-specific information is available.

The attached spreadsheet highlights:

- Addresses in yellow where no immediate infrastructure concerns are indicated based on main size.
- Addresses in orange that are questionable because they have a 4-inch main or a dead-end main fronting the property.
- Addresses in teal are within Park Merced, which is a privately maintained water system.

Again, these determinations are preliminary and do not constitute final conclusions.

Answers to the additional questions follow below.

Adequacy of Existing Water Mains and Services

- **Question:** *Based on SFPUC standards and available system data, are the existing water mains and service connections serving these buildings—many of which are approximately 4 inches in diameter—considered sufficient to support automatic fire sprinkler system demands, including required fire flow and residual pressure?*
- **SFPUC Response:** Based on the preliminary review, many of the buildings listed are served by water mains that, based on size alone, do not raise immediate system-level concerns. However, SFPUC cannot make a definitive determination regarding adequacy of existing water mains or service connections without project-specific information. SFPUC has not received sprinkler permit applications, system designs, or fire flow calculations for the buildings identified, and therefore cannot confirm whether existing infrastructure is sufficient based solely on available system data.
- **Question:** *If existing infrastructure is not adequate, what minimum main and service sizes would SFPUC typically require to reliably support sprinkler retrofit installations in multi-building or campus-style developments of this scale?*
- **SFPUC Response:** SFPUC does not prescribe a single minimum main or service size applicable to all sprinkler retrofit projects. Required main and service sizes are determined on a project-by-project basis through hydraulic analysis that considers building height, sprinkler system design, required fire flow, residual pressure, and system conditions. Without project-specific design information, SFPUC cannot identify minimum sizes applicable to the buildings referenced in the letter.
- **Question:** *Would upgrades to 12-inch distribution mains or other system improvements likely be necessary to meet SFPUC and Fire Code requirements either on-site or within the adjacent public right-of-way?*

- **SFPUC Response:** Whether upgrades to distribution mains or other system improvements are required cannot be determined in the absence of project-specific sprinkler designs and hydraulic analysis. In some cases, on-site improvements or dedicated fire services may be sufficient; in others, off-site upgrades within the public right-of-way may be necessary. The need for any such upgrades is evaluated through SFPUC's standard review process and cannot be generalized across the identified buildings.

Hydraulic Capacity and Modeling Requirements

- **Question:** *Does SFPUC have existing hydraulic modeling or system capacity data for the pressure zone(s) serving the affected buildings that could be used to evaluate fire flow availability for sprinkler retrofits?*
- **SFPUC Response:** SFPUC maintains a potable water system hydraulic model that is used to evaluate fire flow availability as part of project-specific review.
- **Question:** *If new hydraulic modeling is required, what fire flow scenarios (e.g., number of simultaneous sprinkler systems, hydrant flows, duration) would SFPUC require to assess system adequacy?*
- **SFPUC Response:** SFPUC uses a hydraulic model to ensure the public water system can provide the required fire flow demand on a project-by-project basis depending on the proposed sprinkler system design and applicable Fire Code requirements.
- **Question:** *Based on SFPUC experience, are there known system constraints in the applicable pressure zone(s) that could limit the ability to support sprinkler retrofit demands without significant infrastructure upgrades?*
- **SFPUC Response:** SFPUC cannot identify specific system constraints affecting individual buildings without project-specific review.

Reliability, Energy Supply, and Emergency Operations

- **Question:** *Is the water supply to the affected service area primarily supported by gravity-fed storage, pumping facilities, or a combination of both?*
- **SFPUC Response:** For the addresses provided, the water supply is gravity-fed via reservoirs.
- **Question:** *In the event of a power outage, what measures (e.g., emergency generators, elevated storage tanks) are in place to ensure continued water availability and pressure sufficient for fire suppression purposes?*

- **SFPUC Response:** For the addresses provided, the water supply is gravity-fed via reservoirs. There is no pumping involved to supply the water at the service connection point.
- **Question:** *Are there any known limitations or operational risks related to energy supply or emergency power that could affect the reliability of water service during a fire event?*
- **SFPUC Response:** For the addresses provided, the water supply is gravity-fed via reservoirs. Therefore, energy supply or emergency power will not affect supply to a water service.

Building-Level Service Capacity and Sprinkler Demand

- **Question:** *From SFPUC's perspective, how many simultaneous sprinkler systems or fire protection demands could reasonably be supported by a typical 4-inch service connection under current system conditions?*
- **SFPUC Response:** Determination of sprinkler system demand and Fire Code compliance falls under the jurisdiction of the SFFD. SFPUC does not establish a fixed number of sprinkler systems or fire protection demands that can be supported by a service of a given size.
- **Question:** *Would SFPUC anticipate the need for dedicated fire services, larger service laterals, or multiple connections to comply with Fire Code sprinkler retrofit requirements at individual buildings?*
- **SFPUC Response:** The need for dedicated fire services or larger connections is determined on a project-by-project basis. Some sprinkler retrofit projects may be accommodated with existing services, while others may require new or upgraded connections depending on system conditions and Fire Code requirements. If existing water distribution system pressures and flow are inadequate, project sponsors are responsible for system improvements required to meet the demands.
- **Question:** *Are there SFPUC guidelines or precedents that define maximum sprinkler demand per service size for retrofit projects involving existing buildings?*
- **SFPUC Response:** SFPUC does not apply universal maximum sprinkler demand thresholds by service size. Each project is evaluated individually using applicable codes, standards, and hydraulic analysis based on submitted design information.

Feasibility, Phasing, and Implementation Considerations

- **Question:** *Does SFPUC consider sprinkler retrofits of this scale to be feasible without major public infrastructure upgrades, or would system-wide improvements likely be required?*

- **SFPUC Response:** SFPUC cannot make a generalized determination regarding feasibility without project-specific information. Some projects may be feasible without major upgrades, while others may require improvements.
- **Question:** *If upgrades are required, what is the typical process, timeline, and cost responsibility framework for coordinating water main or service upgrades?*
- **SFPUC Response:** If upgrades are required, the typical process would be to apply for new water service through the SFPUC New Installations group. The standard timeline for service installation is typically on the order of 60 days from payment date, subject to project complexity and site conditions. If projects are unusually complex and require off-property improvements, coordination would likely require additional time. Project sponsors are responsible for all costs of the installations required to meet new fire demands.
- **Question:** *Are there recommended phasing strategies or interim measures that SFPUC has previously supported for large retrofit programs where immediate full compliance may be constrained by infrastructure limitations?*
- **SFPUC Response:** Without project-specific proposals, SFPUC cannot recommend phasing approaches for the buildings identified.

SFPUC appreciates the opportunity to provide this preliminary information and to clarify the respective roles of SFPUC and the San Francisco Fire Department in the sprinkler retrofit process. As property owners advance project-specific proposals and submit the required applications and supporting materials, SFPUC will conduct the necessary hydraulic analysis and engineering review to determine infrastructure requirements. We remain available to coordinate further as additional information becomes available.

Sincerely,



Dennis J. Herrera
General Manager
San Francisco Public Utilities Commission

Attachment -
Preliminary Building-Level Assessment

	Address	Notes
1	1855 15TH ST	
2	310 ARBALLO DR	Park Merced - Private Water System.
3	350 ARBALLO DR	Park Merced - Private Water System.
4	333 BATTERY ST	
5	2000 BROADWAY	
6	2090 BROADWAY	
7	1998 BROADWAY	
8	2190 BROADWAY	
9	1940 BROADWAY	
10	2121 BROADWAY	
11	75 BUENA VISTA AVE EAST	
12	555 BUENA VISTA AVE WEST	
13	900-958 BUSH ST	
14	1300-1330 BUSH ST	
15	665 BUSH ST	
16	1257 BUSH ST	
17	1200 CALIFORNIA ST	
18	1177 CALIFORNIA ST	
19	1001 CALIFORNIA ST	
20	845 CALIFORNIA ST	
21	1201 CALIFORNIA ST	
22	125 CAMBON DR	Park Merced - Private Water System.
23	1000 CHESTNUT ST	
24	1090 CHESTNUT ST	
25	1080 CHESTNUT ST	
26	50 CHUMASERO DR	Park Merced - Private Water System.
27	1890 CLAY ST	
28	66 CLEARY CT	
29	380-390 CLEMENTINA ST	
30	330 CLEMENTINA ST	
31	405-465 DAVIS CT	
32	440 DAVIS CT	
33	455 EDDY ST	
34	1200-1240 FILLMORE ST	
35	20-150 FONT BLVD	Park Merced - Private Water System.
36	150 FONT BLVD	Park Merced - Private Water System.
37	1001-1031 FRANKLIN ST	
38	2040 FRANKLIN ST	
39	1835 FRANKLIN ST	
40	1400 GEARY BLVD	
41	531-545 GEARY ST	
42	935 GEARY ST	
43	810 GONZALEZ DR	Park Merced - Private Water System.

Note: This review does not evaluate building-specific sprinkler demand or fire flow requirements. These determinations are preliminary and do not constitute final conclusions.

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44	1200 GOUGH ST	
45	1100 GOUGH ST	
46	1333 GOUGH ST	
47	301-305 GRANT AVE	
48	999 GREEN ST	
49	1070 GREEN ST	
50	1101 GREEN ST	
51	1000 GREEN ST	
52	2100 GREEN ST	
53	1201 GREENWICH ST	
54	455-457 HYDE ST	
55	2238 HYDE ST	
56	2164 HYDE ST	
57	155 JACKSON ST	
58	2100 JACKSON ST	
59	2210 JACKSON ST	
60	2106 JACKSON ST	
61	410-414 JESSIE ST	
62	1360 JONES ST	
63	1250 JONES ST	
64	1333 JONES ST	
65	1221 JONES ST	
66	1310 JONES ST	
67	1280 LAGUNA ST	
68	2525 LARKIN ST	
69	2677 LARKIN ST	
70	520-536 LEAVENWORTH ST	
71	805 LEAVENWORTH ST	
72	6-8 LOCKSLEY AVE	8" Main ends 112' W/6th Ave.
73	8 LOCKSLEY AVE	8" Main ends 112' W/6th Ave.
74	150-156 LOMBARD ST	4" Main in front of property
75	982-998 MARKET ST	
76	1390 MARKET ST	
77	1000 MASON ST	
78	630 MASON ST	
79	124 MASON ST	
80	10 MILLER PL	4" Main ends 111' N/Sacramento
81	30 MILLER PL	4" Main ends 111' N/Sacramento
82	1000 NORTH POINT ST	
83	1050 NORTH POINT ST	
84	515 O'FARRELL ST	
85	477 O'FARRELL ST	
86	631 O'FARRELL ST	
87	575 O'FARRELL ST	

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88	838 PACIFIC AVE	
89	1800 PACIFIC AVE	
90	728 PACIFIC AVE	
91	2299 PACIFIC AVE	
92	2200 PACIFIC AVE	
93	1896 PACIFIC AVE	
94	2100 PACIFIC AVE	
95	665 PINE ST	
96	795 PINE ST	
97	899 PINE ST	
98	1001 PINE ST	
99	1880 PINE ST	
100	737 POST ST	
101	640 POST ST	
102	666 POST ST	
103	940 POWELL ST	
104	850 POWELL ST	
105	2200 SACRAMENTO ST	
106	1190 SACRAMENTO ST	
107	2055 SACRAMENTO ST	
108	1170 SACRAMENTO ST	
109	301-455 SERRANO DR	Park Merced - Private Water System.
110	405 SERRANO DR	Park Merced - Private Water System.
111	944-950 STOCKTON ST	
112	645 STOCKTON ST	
113	535 STOCKTON ST	
114	1615-1673 SUTTER ST	
115	1750 TAYLOR ST	
116	2140 TAYLOR ST	
117	180-194 TURK ST	
118	270-272 TURK ST	
119	350 TURK ST	
120	1251 TURK ST	
121	1100 UNION ST	
122	1150 UNION ST	
123	2030 VALLEJO ST	
124	2190 WASHINGTON ST	
125	1980 WASHINGTON ST	
126	255 WOODSIDE AVE	

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