

From: [Art Thompson](#)
To: [Major, Erica \(BOS\)](#)
Subject: Floodplain Ordinance - BOS File #200537
Date: Thursday, October 8, 2020 6:40:34 PM
Attachments: [image002.png](#)
[image004.png](#)
[SFBOS LUTC - Floodplain Ordinance - BOS File 200537 - 10082020.pdf](#)

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Hi Erica,

Attached please find our informational letter on the San Francisco Floodplain Ordinance for Chair Aaron Peskin and the Land Use & Transportation Committee.

Thank you for distributing the letter to the Committee, on our behalf.

Have a nice weekend, best regards,

Art

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EARTHRISE

WORKS FOR OUR WORLD

October 8, 2020

Chair Aaron Peskin
Land Use & Transportation Committee
Board of Supervisors
City and County of San Francisco
City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

*Via e-mail to Erica Major
Clerk, Land Use & Transportation Committee
erica.major@sfgov.org*

**RE: City of San Francisco Resiliency
Embarcadero Historic District
Board of Supervisors File #200537
Floodplain Management and Flood Insurance Requirements**

Chair Aaron Peskin, Members of the SFBOS Land Use & Transportation Committee:

I understand this important Floodplain Management and Flood Insurance Requirements agenda item was “Continued to the Call of the Chair” on July 13, 2020 and remains open.

Coincidentally, in early September, and after over a year of substantial research and development, our San Francisco-based EPX2 team published our Resiliency Model for the Embarcadero Historic District, which we thought we would share with you today, as a matter of helpful information only. Governing and prevailing FEMA codes, standards, and best practices, and the soon-to-be-adopted City FIRMs, serve as the foundation of our practical EPX2 Resiliency Model, the infrastructure platform for our proposed, research-based solution at Piers 30-32, The Cove.

In our opinion, decisions relative to the seawall and piers, including the San Francisco Floodplain Ordinance, are precedent setting, especially with respect to the Embarcadero Historic District and the resilient waterfront defense of our City. If you are interested, you can learn more about our model, data and research-based project at www.pier30.com. Our website includes a complete, transparent knowledge share of our work, with the following shareable, downloadable links:

[Earthrise EPX2 Resiliency Model](#)

[Earthrise EPX2 Piers 30-32 Proposal - The Cove - Executive Summary Only](#)

[Earthrise EPX2 Piers 30-32 Proposal - The Cove - Complete](#)

As indicated in our Resiliency Model, our team recommends a holistic (district-wide), integrated (seawall, promenade and piers), infrastructure-first approach for the redevelopment of the Embarcadero piers— to ensure vital resiliency and historic rehabilitation consistency; to meet FEMA, NPS, and San Francisco Floodplain Management Ordinance requirements; and to provide greater pier redevelopment certainty. An infrastructure-first approach should be the priority for our waterfront.

With respect to the City’s new FEMA Floodplain Ordinance, my understanding is that the framework and language for this ordinance were developed in 2008 and 2010, and remain virtually unchanged in this draft, except for the addition of the new FEMA FIRMs. A lot has changed in the world since the original 2008-2010 drafting, especially with the added emphasis on climate change and sea level rise risk. The City has learned a lot about what might unfold along our waterfront in the future, too, to combat these risks, including the likelihood of a new seawall. Our impression is that these conditions are all new since the original ordinance was established.

We think we can agree that adaptation measures along the Embarcadero will be new and necessary, too, in some form. As a suggestion, it might be beneficial to have the new floodplain ordinance reflect and consider these new conditions – sea level rise, a higher seawall or similar, higher coastal armoring measure, accelerating extreme sea level events in a coastal zone, the need for freeboard, etc.—and that adaptation responses will be necessary, even prioritized, as a matter of public safety.

Additionally, new ordinance language could benefit the City by providing flexibility and streamlining of the decision-making process for new adaptation measures in the years ahead. Right now, the ordinance does not appear to acknowledge or contemplate these new conditions or adaptation responses, and provide any guidance, path, prioritization, or relief for them, or provide any consistent redevelopment standards for the Embarcadero Historic District, hence, any consistent development certainty, especially for the 100-year-old piers.

Alternatively, in the absence of any acknowledgement of these new conditions and public safety risks, the current ordinance appears to continue to prioritize and provide relief for historic preservation, likely at the risk of safety and property loss, including historic fabric loss, in the face of these accelerating, dynamic flood and sea level rise threats in our more hazardous coastal flood zones. While I am a huge proponent of historic preservation, we thought it important to bring these observations and suggestions, this ordinance-crafting opportunity, to your and the Committee’s attention.

Clearly, time is of the essence. The clock is ticking on mounting flood, climate change and earthquake risks. We believe our EPX2 solutions are innovative and “creative”, as recently requested by Port Commissioners, and add substantial value to the Embarcadero Historic District.

Thank you for the opportunity to share our ideas and perspective with you. Our locally based, EPX2 expert team continues to look forward to building our relationship and partnering with you and the City, while having the opportunity to enhance our urban waterfront built environment together, and preventing natural disasters to our beloved Embarcadero Historic District and our City.

Again, additional detailed information is available for The Cove at www.pier30.com, including complete and transparent, downloadable files of our Resiliency Model and Vision. Let’s get down to earth at The Cove. 🌍

If you have any questions, please do not hesitate to contact me.

Best regards,

A handwritten signature in black ink, appearing to read 'Art'.

Art Thompson
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