

1 [Floodplain Management Program]

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3 **Ordinance amending the floodplain management program established by Chapter 2A,**  
4 **Article XX, Sections 2A.280 - 2A.285 to the San Francisco Administrative Code;**  
5 **providing requirements for designating floodplains and for construction and**  
6 **development in floodplains.**

7

8 NOTE: Additions are *single-underline italics Times New Roman*;  
9 deletions are *strike-through italics Times New Roman*.  
10 Board amendment additions are double-underlined;  
Board amendment deletions are ~~strikethrough-normal~~.

11 Be it ordained by the People of the City and County of San Francisco:

12 Section 1. Environmental Findings. The Planning Department has determined that the  
13 actions contemplated in this Ordinance are in compliance with the California Environmental  
14 Quality Act (California Public Resources Code sections 21000 et seq.). Said determination is  
15 on file with the Clerk of the Board of Supervisors in File No. 100136 and is  
16 incorporated herein by reference.

17 Section 2. Chapter 2A, Article XX, Sections 2A.280 – 2A.285, of the San Francisco  
18 Administrative Code is hereby amended, to read as follows:

19 Sec. 2A.280. FINDINGS AND PURPOSE

20 a. The Federal Emergency Management Agency (FEMA) is in the process of  
21 preparing a Flood Insurance Rate Map (FIRM) for the City and County of San Francisco. The  
22 map will provide flood risk information for flood insurance and floodplain management  
23 purposes under the National Flood Insurance Program (NFIP). FEMA has stated that it  
24 anticipates publishing the final FIRM in early ~~2009~~ 2011.

25

1           b. Under the NFIP, the Federal government provides financial backing to enable  
2 residents and businesses in the community to obtain affordable flood insurance in exchange  
3 for the adoption of floodplain management regulations by the community participating in the  
4 program. Participation in the NFIP will enable businesses and residents within flood prone  
5 areas to obtain certain forms of loans and disaster assistance.

6           c. To join the NFIP, the City must adopt a Floodplain Management Ordinance that  
7 would require new structures, substantial improvements and substantial damage repairs in  
8 designated flood prone areas be protected against flood damage at the time of initial  
9 construction, and prohibit certain uses that would increase flood hazards.

10          d. The City's joining the NFIP and adopting floodplain regulations at this time will  
11 provide all City residents the opportunity to obtain flood insurance that will cover damages  
12 resulting from storm-caused flooding.

13          e. The floodplain management regulations in this ordinance are consistent with the  
14 NFIP requirements for communities, such as San Francisco, for which FEMA is in the process  
15 of preparing but has not completed a final FIRM. When FEMA issues a final FIRM  
16 designating special flood hazard areas in San Francisco, NFIP regulations require that the  
17 adopted floodplain management program be reviewed and modified by authorized community  
18 representatives as necessary to ensure consistency with NFIP requirements applicable to  
19 communities for which FEMA has published a final FIRM.

20          f. FEMA's publication of a final FIRM for San Francisco may affect new *development*  
21 *construction and substantial improvements* in San Francisco, especially renovation and reuse of  
22 finger piers. This Board finds that new construction *and substantially improving facilities* on the  
23 San Francisco waterfront ~~is an~~ *are* important local and state concerns. The San Francisco  
24 waterfront, transferred by the State of California to San Francisco in 1969, is a valuable public  
25 trust asset of the State that provides special maritime, navigational, recreational, cultural and

1 historical benefits to the people of the region and the State. New development, including  
2 rehabilitation of historic structures, on land that is seaward of the reach of mean high tide can  
3 be reasonably safe from flooding, provided that adequate building controls are in place. In  
4 1997, the Port of San Francisco adopted a Waterfront Land Use Plan to guide development  
5 and use of the Port's waterfront property consistent with its trust obligations, and in 2006 the  
6 Port created a Capital Plan identifying public facilities necessary to maintaining a viable San  
7 Francisco waterfront. This Board urges the Port of San Francisco and FEMA to develop,  
8 before publication of final FIRM, long-term floodplain management controls that both address  
9 any flooding hazard risks and allow the City to implement the Waterfront Land Use Plan and  
10 the Capital Plan, as they may be amended, and achieve the goals of that Plan, including the  
11 preservation of historic piers.

12 g. The floodplain management regulations adopted by this ordinance were developed  
13 by the City Administrator, in consultation with the Department of Building Inspection, the  
14 Planning Department, the Department of Public Works, *the Office of Economic and Workforce*  
15 *Development*, the Public Utilities Commission, the Port of San Francisco, the San Francisco  
16 International Airport, the San Francisco Redevelopment Agency, *the Treasure Island*  
17 *Development Authority*, and the City Attorney's Office.

18 h. The City and County of San Francisco adopts the following floodplain management  
19 regulations under its authority to adopt regulations designed to promote the public health,  
20 safety, and general welfare of its residents granted by Article II, sections 5 and 7 of the  
21 California Constitution. Such regulations are intended to remain in effect until FEMA adopts a  
22 final FIRM, at which time the City and FEMA will need to review and revise these regulations  
23 under federal requirements consistent with the purposes of this ordinance.  
24  
25

1 i. The purpose of this ordinance is to promote the public health, safety, and general  
2 welfare, and minimize public and private losses due to flood conditions in specific areas by  
3 imposing provisions designed to:

- 4 1. Protect human life and health;
- 5 2. Minimize expenditure of public money for costly flood control projects;
- 6 3. Minimize the need for rescue and relief efforts associated with flooding and  
7 generally undertaken at the expense of the general public;
- 8 4. Minimize prolonged business interruptions;
- 9 5. Minimize damage to public facilities and utilities such as water and gas  
10 mains; electric, telephone and sewer lines; and streets and bridges located in  
11 areas of special flood hazard;
- 12 6. Help maintain a stable tax base by providing for the sound use and  
13 development of areas of special flood hazard so as to minimize future  
14 blighted areas caused by flood damage;
- 15 7. Ensure that potential buyers are notified that property is in an area of special  
16 flood hazard; and
- 17 8. Ensure that those who occupy the areas of special flood hazard assume  
18 responsibility for their actions.

19 Sec. 2A.281. DEFINITIONS

20 a. "Accessory structure" means a structure that is either solely for the parking of no more than  
21 2 cars, or a small, low cost shed for limited storage, less than 150 square feet and \$1,500 in value.

22 b. "Accessory use" means a use which is incidental and subordinate to the principal use of the  
23 parcel of land on which it is located.

24 a. "Area of special flood hazard" means the land in the floodplain within a community subject  
25 to a one percent or greater chance of flooding in any given year.

1           bc. "Base flood" means a flood that has a one percent chance of being equaled or  
2 exceeded in any given year (also called the "100 year flood").

3           d. "Base flood elevation" (BFE) means the elevation shown on the Flood Insurance Rate Map  
4 for Zones AE, AH, A1-30, VE and V1-V30 that indicates the water surface elevation resulting from a  
5 flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

6           ee. "Building" - see "Structure."

7           df. "Flood" or "flooding" means:

8                   1. A general and temporary condition of partial or complete inundation of  
9 normally dry land areas from: the overflow of inland or tidal waters; the unusual and rapid  
10 accumulation or runoff of surface waters from any source; or mudslides (i.e., mudflows) which  
11 are proximately caused by flooding.

12                   2. The collapse or subsidence of land along the shore of a lake or other body of  
13 water as a result of erosion or undermining caused by waves or currents of water exceeding  
14 anticipated cyclical levels or suddenly caused by an unusual and unforeseeable event which  
15 results in flooding as defined in this definition.

16           eg. "Floodplain or flood prone area" means any land area designated by the City  
17 Administrator as susceptible to being inundated by 100-year flood.

18           fh. "Floodplain Administrator" is the City Administrator.

19           i. "Flood Boundary and Floodway Map" (FBFM) means the official map on which the Federal  
20 Emergency Management Agency or Federal Insurance Administration has delineated both the areas of  
21 special flood hazards and the floodway.

22           j. "Flood Insurance Rate Map" (FIRM) means the official map on which the Federal  
23 Emergency Management Agency or Federal Insurance Administration has delineated both the areas of  
24 special flood hazards and the risk premium zones applicable to the community.

1            k. "Flood Insurance Study" means the official report provided by the Federal Insurance  
2 Administration that includes flood profiles, the Flood Insurance Rate Map, the Flood Boundary and  
3 Floodway Map, and the water surface elevation of the base flood.

4            gl. "Floodplain management" means the operation of a program of corrective and  
5 preventive measures for reducing flood damage and preserving and enhancing, where  
6 possible, natural resources in the floodplain; including but not limited to emergency  
7 preparedness plans, flood control works, floodplain management regulations, and open space  
8 plans.

9            hm. "Floodplain management regulations" means this ordinance and other zoning  
10 ordinances, subdivision regulations, building codes, health regulations, special purpose  
11 ordinances (such as grading and erosion control) and other application of police power which  
12 control development in flood prone areas. This term includes applicable federal, state or local  
13 regulations that provide standards for preventing and reducing flood loss and damage.

14            n. "Floodproofing" means any combination of structural and nonstructural additions, changes,  
15 or adjustments to structures which reduce or eliminate flood damage to real estate or improved real  
16 property, water and sanitary facilities, structures, and their contents.

17            o. "Floodway" means the channel of a river or other watercourse and the adjacent land areas  
18 that must be reserved in order to discharge the base flood without cumulatively increasing the water  
19 surface elevation more than one foot. Also referred to as "regulatory floodway."

20            pi. "Functionally dependent use" means a use that cannot perform its intended  
21 purpose unless it is located or carried out in close proximity to water. The term includes, but  
22 is not limited to, docking facilities, port facilities that are necessary for the loading and  
23 unloading of cargo or passengers, facilities that provide waterfront public access, and ship  
24 building and ship repair facilities,

25            qj. "Historic structure" means any structure that is

1           1. Listed individually in the National Register of Historic Places or preliminarily  
2 determined by the Secretary of the Interior as meeting the requirements for individual listing  
3 on the National Register;

4           2. Certified or preliminarily determined by the Secretary of the Interior as  
5 contributing to the historical significance of a registered historic district or a district  
6 preliminarily determined by the Secretary to qualify as a registered historic district;

7           3. Individually listed on a state inventory of historic places in states with historic  
8 preservation programs which have been approved by the Secretary of Interior; or

9           4. Individually listed on a local inventory of historic places in communities with  
10 historic preservation programs, including, but not limited to those structures that have been  
11 certified either by an approved state program as determined by the Secretary of the Interior or  
12 directly by the Secretary of the Interior in states with approved programs.

13           5. Determined to be an historic resource in accordance with the City and  
14 County of San Francisco Planning Department's CEQA Review Procedures for Historic  
15 Resources.

16           6. In an historic district that is listed in the National Register of Historic Places.

17         ~~rk.~~ "New construction" means structures for which the "start of construction"  
18 commenced on or after the effective date of floodplain management regulations adopted  
19 pursuant to this ordinance, and includes any substantial improvements to such structures.

20         ~~sl.~~ "One hundred year flood" or "100 year flood" means a flood that has a one percent  
21 chance of being equaled or exceeded in any given year.

22         ~~t.~~ "Regulatory floodway" means the channel of a river or other watercourse and the adjacent  
23 land areas that must be reserved in order to discharge the base flood without cumulatively increasing  
24 the water surface elevation more than one foot. Also referred to as "floodway."

1           u. "Special flood hazard area (SFHA)" means an area in the floodplain subject to a 1 percent  
2 or greater chance of flooding in any given year that is shown on FIRM as Zone A, AO, AI A30, AE,  
3 A99, AH, VI V30, VE or V.

4           vm. "Start of construction" includes substantial improvement and other proposed new  
5 development and means the date the building permit was issued, provided the actual start of  
6 construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement  
7 was within 180 days from the date of the permit. The actual start means either the first  
8 placement of permanent construction of a structure on a site, such as the pouring of slab or  
9 footings, the installation of piles, the construction of columns, or any work beyond the stage of  
10 excavation. Permanent construction does not include land preparation, such as clearing,  
11 grading, and filling; nor does it include the installation of streets and/or walkways; nor does it  
12 include excavation for a basement, footings, piers, or foundations or the erection of temporary  
13 forms; nor does it include the installation on the property of accessory buildings, such as  
14 garages or sheds not occupied as dwelling units or not part of the main structure. For a  
15 substantial improvement, the actual start of construction means the first alteration of any wall,  
16 ceiling, floor, or other structural part of a building, whether or not that alteration affects the  
17 external dimensions of the building.

18           wn. "Structure" means a walled and roofed building that is principally above ground;  
19 this includes a gas or liquid storage tank or a manufactured home.

20           xo. "Substantial damage" means damage of any origin sustained by a structure  
21 whereby the cost of restoring the structure to its before damaged condition would equal or  
22 exceed 50 percent of the market value of the structure before the damage occurred. The term  
23 does not include any alteration of or exterior addition to a damaged "historic structure,"  
24 provided that the alteration or addition will not preclude the structure's continued designation  
25 as a "historic structure."



1           yp. "Substantial improvement" means any reconstruction, rehabilitation, addition, or  
2 other proposed new development of a structure, the cost of which equals or exceeds 50  
3 percent of the market value of the structure before the "start of construction" of the  
4 improvement. This term includes structures that have incurred "substantial damage",  
5 regardless of the actual repair work performed. The term does not, however, include either:

6                   1. Any project for improvement of a structure to correct existing violations or  
7 state or local health, sanitary, or safety code specifications which have been identified by the  
8 local code enforcement official and which are the minimum necessary to assure safe living  
9 conditions, or

10                   2. Any alteration of, or attached exterior addition to, an "historic structure,"  
11 provided that the alteration or addition will not preclude the structure's continued designation  
12 as an "historic structure."

13           Sec. 2A.282. ADMINISTRATION

14           a. FLOODPLAIN ADMINISTRATOR. The City Administrator shall be the Floodplain  
15 Administrator, as defined by federal and state floodplain management laws and regulations,  
16 and for purposes of the City's participation in the National Flood Insurance Program  
17 administered by the United States Department of Homeland Security. The duties and  
18 responsibilities of the Floodplain Administrator shall include, but not be limited to providing  
19 oversight and guidance for the administration of floodplain management requirements and  
20 policies; ~~designating flood prone areas within City jurisdiction by obtaining, reviewing, and~~  
21 ~~reasonably using appropriate base flood data available from federal, state or other sources;~~  
22 ~~maintaining and updating flood prone area maps in a form sufficient for public review and use;~~ and  
23 providing floodplain management reports and information as required by applicable federal,  
24 state and local requirements. The City Administrator may delegate some or all of these duties  
25 and responsibilities to appropriate City staff.

1 b. Floodplain and flood prone area maps.

2 1. The Floodplain Administrator shall designate flood prone areas within City  
3 jurisdiction by obtaining, reviewing, and reasonably using appropriate base flood data available from  
4 federal, state or other sources; and shall maintain and update flood prone area maps in a form  
5 sufficient for public review and use.

6 2. In addition, areas of special flood hazard identified by FEMA in its adopted final  
7 flood insurance studies FIRMs, and FBFMs that are located outside San Francisco and contain City-  
8 owned and operated facilities, including but not limited to the "Flood Insurance Study (FIS) for the  
9 County of San Mateo," dated August 5, 1986, with accompanying FIRMs and FBFMs, dated July 5,  
10 1984, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared  
11 to be a part of this ordinance.

12 bc. As provided by Appendix D to the San Francisco Charter and in accordance with  
13 Chapter 1A of the San Francisco Building Code, the Department of Building Inspection is  
14 responsible for reviewing all development permit applications to determine whether the permit  
15 requirements of this ordinance have been satisfied, whether all other required state and  
16 federal permits have been obtained; and whether the site is reasonably safe from flooding.

17 ed. As provided by Section 4.114 of the San Francisco Charter, the San Francisco Port  
18 Commission, acting by and through its Chief Harbor Engineer, is responsible for reviewing all  
19 development permit applications for buildings and structures within the Port Commission's  
20 jurisdiction to determine whether the permit requirements of this ordinance have been  
21 satisfied, whether all other required state and federal permits have been obtained; and  
22 whether the site is reasonably safe from flooding. Under the Charter, the Port Commission has  
23 authority to adopt All-building standards for construction in Port areas designated by the City  
24 Administrator as flood prone shall be that are consistent with the requirements of this ordinance  
25 and applicable federal and state floodplain management regulations, and which building

1 standards shall become effective when ~~such building standards are~~ adopted by the Port  
2 Commission.

3 *de.* All building standards for construction on City-owned property located outside the  
4 boundaries of the City and in areas designated by FEMA as flood prone shall be consistent  
5 with the requirements of this ordinance and applicable federal and state floodplain  
6 management regulations. Each City department with jurisdiction over the operations and  
7 maintenance of such property shall determine whether the building standards requirements of  
8 this ordinance have been satisfied, whether all other required state and federal permits have  
9 been obtained; and whether the site is reasonably safe from flooding.

10 Sec. 2A.283. PROVISIONS FOR FLOOD HAZARD REDUCTION

11 a. Permits. A permit or other applicable approval shall be obtained for all proposed  
12 construction of buildings and structures located within a floodplain or flood prone area  
13 designated ~~as such by the City Administrator in accordance with Section 2A.282(b),~~ and shall be  
14 issued in accordance with applicable procedures for authorizing such construction within the  
15 appropriate City departments' jurisdiction. No building, structure or land shall be constructed,  
16 located, extended, converted, or altered within a floodplain or flood prone area without full  
17 compliance with the requirements of this ordinance and other applicable regulations. The City  
18 Administrator shall maintain a record of the elevation (in relation to NAVD88) of the lowest floor  
19 (including basement) of all new and substantially improved structures, and the elevation (in relation to  
20 NAVD88) to which all structures that were floodproofed in accordance with Section 2A.283(b), (c) or  
21 (d) of this Article.

22 b. Standards Of Construction for flood prone areas designated pursuant to section  
23 2A.282(b)(1) of this article.

24 1. If a proposed building site is in a flood-prone area, all new construction and  
25 substantial improvements shall:

1 A. Be designed (or modified) and adequately anchored to prevent  
2 flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and  
3 hydrostatic loads, including the effects of buoyancy.

4 B. Be constructed:

- 5 i. With materials and utility equipment resistant to flood damage;
- 6 ii. Using methods and practices that minimize flood damage;

7 C. With electrical, heating, ventilation, plumbing and air conditioning  
8 equipment and other service facilities that are designed and/or located so as to prevent water  
9 from entering or accumulating within the components during conditions of flooding.

10 2. The Chief Harbor Engineer of the Port of San Francisco and the Floodplain  
11 Administrator shall consult and coordinate with FEMA to create appropriate building standards  
12 for developing any finger piers located in flood prone areas in Port jurisdiction, before  
13 publication of FEMA's final FIRM for San Francisco. *No later than October 1, 2008, the*  
14 *Floodplain Administrator shall provide a report to the Board of Supervisors regarding the creation of*  
15 *such building standards.*

16 e3. Standards For Subdivisions. If a subdivision proposal is in a flood-prone  
17 area, any such proposals shall be reviewed to assure that:

18 1A. All such proposals are consistent with the need to minimize flood  
19 damage within the flood prone area;

20 2B. All public utilities and facilities such as sewer, gas, electrical, and  
21 water systems are located and constructed to minimize or eliminate flood damage; and

22 3C. Adequate drainage is provided to reduce exposure to flood hazards.

23 4A. Standards For Utilities. All new and replacement water supply and sanitary  
24 sewage systems shall be designed to minimize or eliminate:

25 1A. Infiltration of flood waters into the systems, and

1                   2B. Discharge from the systems into floodwaters.

2                   c. Standards Of Construction for floodplain areas designated pursuant to section 2A.282(b)(2)  
3 of this article. In addition to the standards of construction set forth in section 2A.283(b), all new  
4 construction and substantial improvements shall be designed and constructed in accordance with the  
5 requirements of San Francisco Building Code section 1612, as amended from time to time.

6                   ed. Variances.

7                   1. A variance from the standards provided by the section may be granted by the  
8 appropriate approval authority for a parcel of property with physical characteristics so unusual  
9 that complying with the requirements of this ordinance would create an exceptional hardship  
10 to the applicant or the surrounding property owners. Variances shall be issued upon a  
11 determination that the variance is the minimum necessary, considering the flood hazard, to  
12 afford relief. Variance determinations shall include a showing of good and sufficient cause  
13 that:

14                   A. Failure to grant the variance would result in exceptional hardship to  
15 the applicant; and

16                   B. The granting of a variance will not result in increased flood heights,  
17 additional threats to public safety, or extraordinary public expense, create a nuisance, cause  
18 fraud and victimization of the public, or conflict with existing local laws or ordinances.

19                   2. Notwithstanding subsection ~~2A.284(e)(1)~~ 2A.283(d)(1) above, variances may  
20 be issued for new construction, substantial improvement, and other proposed new  
21 development to be erected on a lot of one-half acre or less in size contiguous to and  
22 surrounded by lots with existing structures constructed below the base flood level.

23                   3. Notwithstanding subsection ~~2A.284(e)(1)~~ 2A.283(d)(1) above, variances shall  
24 be issued for:

1                   A. The repair or rehabilitation of, or exterior addition to, historic structures  
2 upon a determination that the proposed repair, rehabilitation or addition will not preclude the  
3 structure's continued designation as an historic structure.

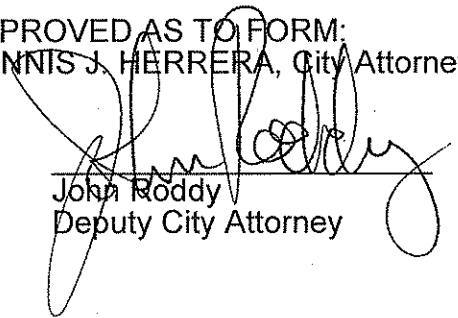
4                   B. New construction, substantial improvement, and other proposed new  
5 development necessary for the conduct of a functionally dependent use, provided that the  
6 structure or building is protected by methods that minimize flood damages, and that issuance  
7 of the variance does not result in additional threats to public safety or create a public  
8 nuisance.

9                   Section 2A.284. LIABILITY. The degree of flood protection required by this ordinance  
10 is considered reasonable for regulatory purposes and is based on scientific and engineering  
11 considerations. This ordinance shall not create liability on the part of the City and County of  
12 San Francisco, any officer or employee thereof, the State of California, or the Federal  
13 Insurance Administration, Federal Emergency Management Agency, for any flood damages  
14 that result from reliance on this ordinance or any administrative decision made hereunder.

15                   Section 2A.285. SEVERABILITY. This ordinance and the various parts thereof are  
16 hereby declared to be severable. Should any section of this ordinance be declared by the  
17 courts to be unconstitutional or invalid, such decision shall not affect the validity of the  
18 ordinance as a whole, or any portion thereof other than the section so declared to be  
19 unconstitutional or invalid.

20  
21 APPROVED AS TO FORM:  
22 DENNIS J. HERRERA, City Attorney

23 By:

  
24 John Roddy  
25 Deputy City Attorney

Supervisor Elsbernd  
BOARD OF SUPERVISORS



City and County of San Francisco  
Tails  
Ordinance

City Hall  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102-4689

File Number: 100136

Date Passed: March 23, 2010

Ordinance amending the floodplain management program established by Chapter 2A, Article XX, Sections 2A.280 - 2A.285 to the San Francisco Administrative Code; providing requirements for designating floodplains and for construction and development in floodplains.

March 16, 2010 Board of Supervisors - PASSED, ON FIRST READING

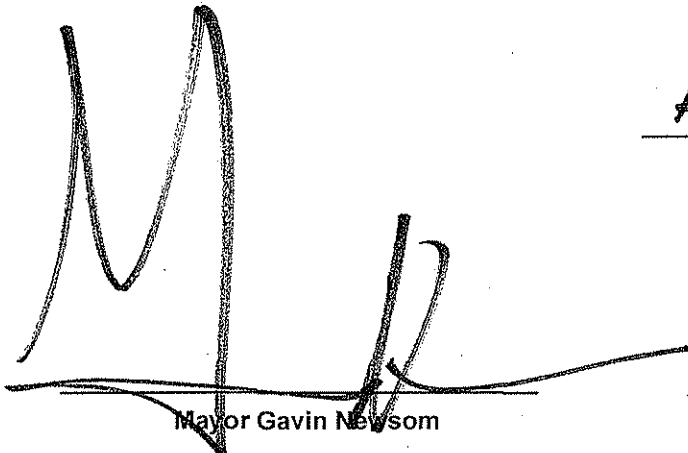
Ayes: 9 - Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar and Maxwell  
Excused: 2 - Alioto-Pier and Mirkarimi

March 23, 2010 Board of Supervisors - FINALLY PASSED

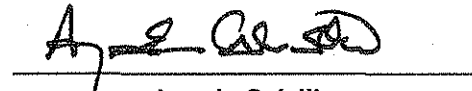
Ayes: 10 - Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar, Maxwell and Mirkarimi  
Excused: 1 - Alioto-Pier

File No. 100136

I hereby certify that the foregoing  
Ordinance was FINALLY PASSED on  
3/23/2010 by the Board of Supervisors of the  
City and County of San Francisco.



Mayor Gavin Newsom



Angela Calvillo  
Clerk of the Board

3/25/2010  
Date Approved