



STAFF REPORT

SAUSALITO CITY COUNCIL

AGENDA TITLE:

Adoption of an ordinance amending Chapter 8.40 of the Sausalito Municipal Code regarding Fire Codes (ZOA 10-360).

RECOMMENDED ACTIONS:

- Open the public hearing and take public testimony; and
- Adopt the attached resolution (see **Attachment 1**) which identifies the local conditions requiring changes or modifications to the fire codes; and
- Waive second reading, read by title only and adopt an Ordinance of the City Council of the City of Sausalito Amending Chapter 8.40 of the Sausalito Municipal Code and Adopting the California Fire Code, International Fire Code, and International Wildland-Urban Interface Code Prescribing Regulations Governing Conditions Hazardous to Life and Property from Fire or Explosion; Providing for the Issuance of Permits for Hazardous Uses or Operations; and Establishing a Fire Prevention Bureau and Providing officers Therefore and Defining Their Powers and Duties (ZOA 10-360) (see **Attachment 2**).

SUMMARY

The attached ordinance adopts the California Fire Code, International Fire Code, and the International Wildland-Urban Interface Code with local amendments which prescribe regulations governing conditions that are hazardous to life and property from fire or explosion. The attached resolution documents the conditions allowing adoption of the local amendments of the codes listed above.

BACKGROUND

The State of California adopts a new fire model code every three years which supersedes the former model code. The new model code becomes effective statewide without further action by cities. Cities have the option of adopting more strict amendments to the model code if the respective cities make certain findings based upon local conditions. Sausalito has not exercised its option to adopt local amendments since 2002.

In July 2010, the California Building Standards Commission adopted the 2010 California Fire Code (the "Model Fire Code"). The fire chiefs and fire marshals within Marin County and cities, including Southern Marin Fire Protection District (the "District"), have reviewed the Model Fire Code and recommended its adoption with several local amendments which ensure consistency among fire protection districts and departments and fine tune the Code to meet local needs. Staff has also provided a draft resolution

which, upon adoption, documents the local conditions and makes the necessary findings for adoption of the local amendments (see **Attachment 1**). The Model Fire Code, including the local amendments, is provided in the attached draft ordinance (see **Attachment 2**). Adoption of the ordinance will bring the City up to current standards with the District and the rest of the County.

On November 9, 2010, the City Council accepted a staff presentation on the draft ordinance and discussed local amendments regarding automatic fire sprinklers and Wildland-Urban Interface Areas. At the conclusion of the discussion, the Council introduced the ordinance and set a public hearing for December 7, 2010 for adoption of the ordinance.

FISCAL IMPACT

Fire District staff will be proposing adjustments to the City's fee schedule for services rendered (e.g., plan checks, inspections, permits) in the near future to recoup additional costs incurred by staff necessary to implement the attached ordinance.

RECOMMENDATIONS

Staff recommends the Council take the following actions:

- Open the public hearing and take public testimony; and
- Adopt the attached resolution (see **Attachment 1**) which identifies the local conditions requiring changes or modifications to the fire codes; and
- Waive second reading, read by title only and adopt an Ordinance of the City Council of the City of Sausalito Amending Chapter 8.40 of the Sausalito Municipal Code and Adopting the California Fire Code, International Fire Code, and International Wildland-Urban Interface Code Prescribing Regulations Governing Conditions Hazardous to Life and Property from Fire or Explosion; Providing for the Issuance of Permits for Hazardous Uses or Operations; and Establishing a Fire Prevention Bureau and Providing officers Therefore and Defining Their Powers and Duties (ZOA 10-360) (see **Attachment 2**).

ATTACHMENTS

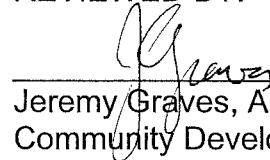
1. Resolution Identifying Local Conditions Requiring Changes or Modifications (Draft)
2. Ordinance amending Chapter 8.40 of the Sausalito Municipal Code regarding Fire Codes (Draft)

PREPARED BY:



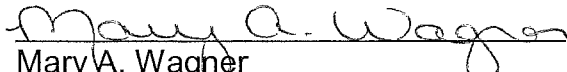
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2
3
4 **ORDINANCE NO. 1203**
5

6 **AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAUSALITO**
7 **AMENDING CHAPTER 8.40 OF THE SAUSALITO MUNICIPAL CODE AND**
8 **ADOPTING THE CALIFORNIA FIRE CODE, INTERNATIONAL FIRE CODE, AND**
9 **INTERNATIONAL WILDLAND-URBAN INTERFACE CODE PRESCRIBING**
10 **REGULATIONS GOVERNING CONDITIONS HAZARDOUS TO LIFE AND**
11 **PROPERTY FROM FIRE OR EXPLOSION; PROVIDING FOR THE ISSUANCE OF**
12 **PERMITS FOR HAZARDOUS USES OR OPERATIONS; AND ESTABLISHING A**
13 **FIRE PREVENTION BUREAU AND PROVIDING OFFICERS THEREFORE AND**
14 **DEFINING THEIR POWERS AND DUTIES (ZOA 10-360)**
15
16

17
18 The City Council of the City of Sausalito hereby ordains as follows:
19

20 **SECTION 1.** Chapter 8.40 of Title 8 of the Sausalito Municipal Code is hereby
21 amended in its entirety to read as follows:
22

23 **Chapter 8.40**
24 **FIRE CODE**
25

26 **Sections:**
27

- 28 8.40.010 Adoption of California Fire Code, International Fire Code and Appendix
29 A of the International Wildland Urban Interface Code
30 8.40.020 Establishment and Duties of the Fire Prevention Bureau
31 8.40.030 Definitions
32 8.40.040 Establishment of Geographic Limits of Districts in which Storage of Class
33 I, Class II and Class III Liquids in Outside Aboveground Tanks is
34 Prohibited
35 8.40.050 Establishment of Geographic Limits of Districts in which Storage of Class
36 I, Class II and Class III Liquids in Aboveground Tanks is Prohibited
37 8.40.060 Establishments of Geographic Limits in which Storage of Liquefied
38 Petroleum Gases is to be Restricted
39 8.40.070 Establishment of Geographic Limits of Districts in which Storage of
40 Explosives and Blasting Agents is to be Prohibited
41 8.40.080 Establishment of the Geographic Limits of Districts in which the Storage
42 of Compressed Natural Gas is to be Prohibited
43 8.40.090 Establishment of the Geographic Limits of Districts in which the Storage
44 of Stationary Tanks of Flammable Cryogenic Fluids is to be Prohibited
45 8.40.100 Establishment of the Geographic Limits of Districts in which the Storage
46 of Hazardous Materials is to be prohibited or Limited

ATTACHMENT 1
(19 PAGES)

- 1 8.40.110 Amendments made to the 2010 California Fire code, 2009 International
2 Fire Code and 2009 International Wildland-Urban Interface Code
3 8.40.120 Authority to Arrest and Issue Citations
4 8.40.130 Penalties
5
6

7 **8.40.010 Adoption of California Fire Code, International Fire Code and Appendix A of**
8 **the International Wildland Urban Interface Code.**
9

10 The City Council of the City of Sausalito hereby adopts, for the purpose of prescribing
11 regulations governing conditions hazardous to life and property from fire or explosion the
12 following:
13

- 14 1. The 2010 California Fire Code, which consists of certain portions of the 2009 edition of
15 the International Fire Code as amended by the California Building Standards
16 Commission, including:
17 a. Appendix Chapter 4 Special Detailed Requirements Based On Use And
18 Occupancy,
19 b. Appendix B Fire Flow Requirements For Buildings,
20 c. Appendix C Fire Hydrant Locations And Distribution,
21 d. Appendix E Hazard Categories,
22 e. Appendix F Hazard Ranking,
23 f. Appendix G Cryogenic Fluids Weight And Volume Equivalents, and
24 g. Appendix H Hazardous Materials Management Plans And Hazardous Materials
25 Inventory Statements.
26
27 2. The International Fire Code published by the International Fire Code Council, Inc., 2009
28 Edition hereof and the whole thereof, save and except such portions as are hereinafter
29 deleted, modified or amended by Section 8.40.110.
30
31 3. Appendix A of the 2009 edition of the International Wildland-Urban Interface Code save
32 and except such portions as are hereinafter deleted, modified or amended by Section
33 8.40.110.
34

35 Not less than one (1) copy of the Codes and Standards hereby adopted is filed in the office of the
36 Fire Marshal of the City of Sausalito and the City Clerk for the City of Sausalito and the same
37 are hereby adopted and incorporated fully as if set out at length herein, and from the date on
38 which this Ordinance takes effect, and the provisions thereof shall be controlling within the
39 limits of the City of Sausalito.
40

41 **8.40.020 Establishment and Duties of the Fire Prevention Bureau.**
42

43 The 2010 California Fire Code, which consists of certain portions of the 2009 edition of the
44 International Fire Code as amended by the California Building Standards Commission, and the
45 2009 edition of the International Fire Code, and Appendix A of the 2009 edition of the
46 International Wildland-Urban Interface Code as adopted and amended herein, shall be enforced

1 by the Fire Prevention Bureau of the City of Sausalito Fire Department and shall be operated
2 under the supervision of the Fire Chief of the City of Sausalito.

3
4 **8.40.030 Definitions.**

5
6 Wherever they appear in the California and International Fire Codes, unless otherwise provided,
7 the following words shall have the meanings ascribed to them in this section:

- 8
9 (a) Whenever the words "Fire Code" are used they shall mean those Codes
10 and Standards adopted in Section 8.40.010.
11
12 (b) Wherever the word "jurisdiction" is used in the Fire Code, it shall be held
13 to mean the City of Sausalito.
14
15 (c) Wherever the term "counsel" is used in the Fire Code, it shall be held to
16 mean the City Attorney for the City of Sausalito.
17
18 (d) Wherever the words "Fire Code Official" are used in the Fire Code, they
19 shall be held to mean the Fire Chief or Fire Marshal of the City of
20 Sausalito.
21

22 **8.40.040 Establishment of Geographic Limits of Districts in which Storage of Class I,
23 Class II and Class III Liquids in Outside Aboveground Tanks is Prohibited.**

24
25 The geographic limits referred to in Section 3404.2.9.6.1 of the International Fire Code in which
26 storage of Class I, Class II and Class III liquids in outside aboveground tanks is prohibited are
27 amended as follows: In all residential areas, all heavily populated or congested commercial
28 areas, and all open space areas of less than two (2) acres as established by the City of Sausalito.
29

30 **8.40.050 Establishment of Geographic Limits of Districts in which Storage of Class I,
31 Class II and Class III Liquids in Aboveground Tanks is Prohibited.**

32
33 The geographic limits referred to in Section 3406.2.4.4. of the International Fire Code in which
34 storage of Class I, Class II and Class III liquids in aboveground tanks is prohibited are amended
35 as follows: In all residential areas, all heavily populated or congested commercial areas, and all
36 open space areas of less than two (2) acres as established by the City of Sausalito.
37

38 **8.40.060 Establishment of Geographic Limits in which Storage of Liquefied Petroleum
39 Gases is to be Restricted.**

40
41 The geographic limits referred to in Section 3804.2 of the International Fire Code, in which
42 storage of liquefied petroleum gas is restricted, are amended as follows: In all residential areas
43 and all heavily populated or congested commercial areas as established by the City of Sausalito.
44

45 **8.40.070 Establishment of Geographic Limits of Districts in which Storage of Explosives
46 and Blasting Agents is to be Prohibited.**

1
2 The geographic limits in which storage of explosives and blasting agents is prohibited, are as
3 follows: In all residential areas and all heavily populated or congested commercial areas as
4 established by the City of Sausalito.

5
6 **8.40.080 Establishment of the Geographic Limits of Districts in which the Storage of**
7 **Compressed Natural Gas is to be Prohibited.**

8
9 The geographic limits in which the storage of compressed natural gas is prohibited, are hereby
10 established as follows: In all residential areas and all heavily populated or congested commercial
11 areas, as established by the City of Sausalito.

12
13 **8.40.090 Establishment of the Geographic Limits of Districts in which the Storage of**
14 **Stationary Tanks of Flammable Cryogenic Fluids is to be Prohibited**

15
16 The geographic limits in which the storage of flammable cryogenic fluids in stationary
17 containers is prohibited, are hereby established as follows: In all residential areas and all heavily
18 populated or congested commercial areas, as established by the City of Sausalito.

19
20 **8.40.100 Establishment of the Geographic Limits of Districts in which the Storage of**
21 **Hazardous Materials is to be Prohibited or Limited**

22
23 The geographic limits in which the storage of hazardous materials is prohibited or limited, are
24 hereby established as follows: In all residential areas and all heavily populated or congested
25 commercial areas, as established by City of Sausalito.

26
27 **8.40.110 Amendments made to the 2010 California Fire Code, 2009 International Fire**
28 **Code and 2009 International Wildland-Urban Interface Code**

29
30 The 2010 California Fire Code and the 2009 International Fire Code is amended and changed in
31 the following respects:

32
33 Section 102.5 is hereby amended to read as follows:

34
35 **102.5 Application of Residential Code.** Where structures are designed and constructed
36 in accordance with the *International Residential Code*, the provisions of this code shall
37 apply as follows:

38
39 1. Construction and designed provisions: Provisions of this code pertaining to the
40 exterior of the structure shall apply including, but not limited to, premises identification,
41 fire apparatus access and water supplies. Provisions of this code pertaining to the interior
42 of the structure when specifically required by this code including, but not limited to,
43 Section 903.2 shall apply. Where interior or exterior systems or devices are installed,
44 construction permits required by Section 105.7 of this code shall also apply.
45

1 2. Administrative, operational, and maintenance provisions: all such provisions
2 of this code shall apply.

3
4 Section 102.7.1 is hereby added to Chapter 1 and shall read as follows:

5
6 Section 102.7.1 **Nationally Recognized Listed Products.** Any installation of products
7 and equipment due to permits required by this Code shall be Labeled and Listed, as
8 defined in Section 202.

9
10 Section 104.1.1 is hereby added to Chapter 1 and shall read as follows:

11
12 Section 104.1.1 **Supplemental Rules, Regulations and Standards.** The Fire Code
13 Official is authorized to render interpretations of this code and to make and enforce rules
14 and supplemental regulations and to develop Fire Protection Standards to carry out the
15 application and intent of this code.

16
17 Section 104.12 is hereby added to Chapter 1 and shall read as follows:

18
19 Section 104.12. **Damages and expense recovery.** The expense of securing any
20 emergency that is within the responsibility for enforcement of the Fire Chief as given in
21 Section 104 is a charge against the person who caused the emergency. Damages and
22 expenses incurred by any public agency having jurisdiction or any public agency
23 assisting the agency having jurisdiction shall constitute a debt of such person and shall be
24 collectible by the Fire Chief for proper distribution in the same manner as in the case of
25 an obligation under contract expressed or implied. Expenses as stated above shall
26 include, but not be limited to, equipment and personnel committed and any payments
27 required by the public agency to outside business firms requested by the public agency to
28 secure the emergency, monitor remediation, and clean up.

29
30 Section 104.13 is hereby added to Chapter 1 and shall read as follows:

31
32 Section 104.13. **Fire prevention resource sharing.** Other enforcement agencies shall
33 have authority to render necessary assistance in plan review, inspection, code
34 interpretation, enforcement and other fire prevention services when requested to do so.

35
36 Section 105.6.47 of Chapter 1 is hereby amended by adding the following additional operational
37 permits:

38
39 4. **Aircraft refueling vehicles.** An operational permit is required to operate aircraft
40 refueling vehicles. See Chapter 11.

41
42 5. **Automobile wrecking yards.** An operational permit is required to operate an
43 automobile wrecking yard.

1 **6. Cellulose nitrate storage.** An operational permit is required to store or handle more
2 than 25 pounds of cellulose nitrate plastic (pyroxylin) for the manufacturing or assembly
3 of articles or parts of articles containing cellulose nitrate plastics (pyroxylin).
4

5 **7. Fire hydrants and valves.** An operational permit is required to use or operate fire
6 hydrants or valves intended for fire suppression purposes which are installed on water
7 systems accessible to a fire apparatus access road that is open to or generally used by the
8 public.
9

10 **8. Fireworks.** An operational permit is required to store and use fireworks for public
11 display.
12

13 **9. Fire Protection Plan.** An operational permit is required to implement a fire protection
14 plan.
15

16 **10. High-piled storage.** An operational permit is required to use a building or portion
17 thereof as a high-piled storage area exceeding 500 square feet (46m²).
18

19 **11. Miscellaneous combustible storage.** An operational permit is required to store in
20 any building or upon any premises in excess of 2,500 cubic feet (71m³) gross volume of
21 combustible empty packing cases, boxes, barrels, wooden pallets, or similar containers,
22 rubber tires, rubber, cork, or similar combustible material.
23

24 **12. Radioactive material.** An operational permit is required to store or handle at any
25 installation more than 1 micro curie (37,000 Becquerel) of radioactive material not
26 contained in a sealed source or more than 1 millicurie (37,000,000 Becquerel) of
27 radioactive material in a sealed source or sources, or any amount of radioactive material
28 for which specific license from the Nuclear Regulatory Commission is required.
29

30 **13. Spraying or dipping.** An operational permit is required to conduct a spraying or
31 dipping operation utilizing flammable or combustible liquids or the application of
32 combustible powders regulated by Chapter 15.
33

34 **14. Pyrotechnics and special effects.** An operational permit is required to use special
35 effects, open flame, use of flammable or combustible liquids and gases, welding, and
36 parking of motor vehicles in any building or location used for the purpose of motion
37 picture, television and commercial production.
38

39 **15. Live audiences.** An operational permit is required to install seating arrangements for
40 live audiences in approved production facilities, production studios and sound stages.
41 See Chapter 48.
42
43

1 Section 105.7.15 is hereby added to Chapter 1 and shall read as follows:

2
3 Section 105.7.15 **Vegetation Management Plan.** A vegetation management plan may be
4 required by the Fire Code Official prior to issuance of a Fire Department Construction
5 Permit.
6

7 Section 109.3 of Chapter 1 is hereby amended by specifying that any violations of this Chapter
8 shall be a misdemeanor with a fine amount up to \$500 and imprisonment up to 180 days.
9

10 Section 109.3.2. is hereby added to Chapter 1 and shall read as follows:

11 Section 109.3.2 **Abatement of Clearance of Brush or Vegetative Growth from**
12 **Structures.** The Fire Code Official is authorized to give notice to the owner of the
13 property upon which conditions regulated by section 304.1.2 of Chapter 3 and section
14 4907.1 of Chapter 49 exists to correct such conditions. If the owner fails to correct such
15 conditions, the Fire Code Official is authorized to cause the same to be done and make
16 the expense of such correction a lien upon the property where such condition exists.

17 Section 111.4 of Chapter 1 is hereby amended by specifying the fine amounts as not less than
18 \$500 and not more than \$1,500
19

20 Section 202-[F] of Chapter 2 is hereby amended by adding the definition of 'Fire Road' as
21 follows:
22

23 **FIRE ROAD.** See section 502.1.
24

25 Section 202 [S] of Chapter 2 is hereby amended by adding the definition of 'second unit', 'spark
26 arrestor' and 'substantial remodel' as follows:
27

28 **Second Unit** (a.k.a. "Accessory Dwelling Unit, as defined in Chapter 10.88) shall
29 mean an attached or detached additional dwelling unit which provides complete
30 independent living facilities, and which includes permanent provisions for living,
31 sleeping, eating, cooking and sanitation and is located on the same lot as the primary unit.
32

33 **Spark Arrestor** shall mean a chimney device constructed in a skillful-like
34 manner. The net free area of a spark arrestor shall not be less than four times the net free
35 area of the outlet of the chimney. The spark arrestor screen shall have heat and corrosion
36 resistance equivalent to 12-gauge wire, 19-gauge galvanized wire or 24-gauge stainless
37 steel. Opening shall not permit the passage of spheres having a diameter larger than 1/2
38 inch and shall not block the passage of spheres having a diameter of less than 3/8 inch.
39

40 **Substantial Remodel** shall mean the renovation of any structure, which
41 combined with any additions to the structure, affects a floor area which exceeds fifty
42 percent of the existing floor area of the structure within any 36 month period. When any
43 changes are made in the building, such as walls, columns, beams or girders, floor or
44 ceiling joists and coverings, roof rafters, roof diaphragms, foundations, piles or retaining

1 walls or similar components, the floor area of all rooms affected by such changes shall be
2 included in computing floor areas for the purposes of applying this definition. This
3 definition does not apply to the replacement and upgrading of residential roof coverings.
4

5 Section 202 [T] of Chapter 2 is hereby amended by adding the definition of ‘Temporary’,
6 ‘Tracer’ and ‘Tracer charge’ as follows:
7

8 **Temporary** shall mean any use for a period of less than 90 days.
9

10 **Tracer** shall mean any bullet or projectile incorporating a feature which marks or traces
11 the flight of said bullet or projectile by flame, smoke, or other means which results in fire
12 or heat.
13

14 **Tracer Charge** is any bullet or projectile incorporating a feature designed to create a
15 visible or audible effect by means which result in fire or heat and shall include any
16 incendiary bullets and projectiles.
17

18 Section 302.1 is amended by adding the definition of ‘Public Storage Facility’ as follows:
19

20 **Public Storage Facility** shall mean any business that sells, leases or rents space to
21 the public that is enclosed, whether it is a building, storage container or similar
22 configuration.
23

24 Section 318 is hereby added to Chapter 3 and shall read as follows:
25

26 Section 318 **PUBLIC STORAGE FACILITIES**

27 Section 318.1 **General.** Public Storage Facilities shall comply with the provisions of
28 this section.

29 Section 318.2. **Location on Property and Fire Resistance of Exterior.** All public
30 storage facilities shall meet the minimum requirements for setback from property lines or
31 fire resistive construction as set forth in Table 602 of the Building Code for Group S,
32 Division 1 occupancies.
33

34 Section 318.3. **Fire apparatus access.** All public storage facilities shall have fire
35 apparatus access roads provided in accordance with Section 503.1.1.
36

37 Section 318.4. **Storage of Flammable and Combustible Liquids and Hazardous**
38 **Materials.** The storage of hazardous materials or flammable or combustible liquids in
39 public storage facilities is prohibited. Such facilities shall post legible and durable sign(s)
40 to indicate same in a manner and location(s) as specified by the Fire Code Official. This
41 section shall apply to new and existing public storage facilities.

42 Exception: Only those quantities of flammable and combustible liquids necessary for
43 maintenance of the facility may be stored by the facility management per Chapter 34 of
44 this code.
45

1 Section 401.1.1 is hereby added to Chapter 4 and shall read as follows:

2 Section 401.1.1 **Hazardous Occupancies.** In occupancies of a hazardous nature, where
3 access for fire apparatus is unduly difficult, or where special life and fire safety hazards
4 exist as determined by standards of the Fire Code Official , that facility or business
5 management shall be required to develop and implement an Emergency Response Plan,
6 provide for an on site Emergency Response Team, Emergency Liaison Officer, staff
7 training and fire drills in accordance with Sections 405 and 406 and standards developed
8 by the Fire Code Official.

9
10 Section 402.1 of Chapter 4 is hereby amended by adding the definition of ‘Pre-plans’ as follows:

11
12 **Pre-plans** shall mean detailed plans of target hazard buildings. These pre-plans include
13 information on the building's location, occupancy, hazards, fire department connections
14 and hydrants, building layout, and other pertinent data that would assist the fire
15 department in case of an emergency.

16
17 Section 408.1.1 is hereby added to Chapter 4 and shall read as follows:

18
19 Section 408.1.1 **Pre-plans:** When required by the Fire Code Official, pre-plans shall be
20 developed for target hazard buildings according to the written standards developed by the
21 authority having jurisdiction.

22
23 Section 408.8.4 is hereby added to Chapter 4 and shall read as follows:

24
25 Section 408.8.4. **Emergency Preparedness for Hotels, Lodging and Congregate**
26 **Houses.** Hotels, lodging and congregate houses shall provide guests with immediate
27 access to a telephone to report emergencies. The exit diagram shall indicate the location
28 of the nearest telephone and instructions to dial 911.

29
30 Section 501.4 of Chapter 5 is hereby amended by adding a sentence to read as follows:

31
32 Failure to comply with this section upon written or verbal notice from the Fire Code
33 Official shall result in an order to cease operations and desist further operations until such
34 time as adequate access and/or water for fire protection is provided.

35
36 Section 502.1 of Chapter 5 is hereby amended by adding a definition of ‘Fire Road’ as follows:

37
38 **Fire Road** shall mean those improved or unimproved roads, public or private, that
39 provide access for firefighting equipment and personnel to undeveloped areas.

40
41 Section 503.1.4 of Chapter 5 is hereby amended by adding a paragraph thereto to read as
42 follows:

43
44 Section 503.1.4 **Fire Roads.** Fire Roads shall be provided for firefighting equipment,
45 apparatus and personnel to undeveloped areas of the City of Sausalito so as to gain access
46 to improved, unimproved, and undeveloped areas of the City of Sausalito, in a manner

1 approved by the Fire Code Official. Any vehicle or other obstructions may be towed
2 away at the owner's expense.

3
4 Section 503.1.5 of Chapter 5 is amended by adding a sentence thereto as follows:

5
6 Section 503.1.5 **Truck company access.** For buildings 3 or more stories or greater than
7 30 feet (10670mm) in height, approved access roads for ladder truck operations shall be
8 provided within the necessary operational distances as specified by the Fire Code
9 Official.

10
11 Section 503.2.6.1. is hereby added to Chapter 5 and shall read as follows:

12
13 Section 503.2.6.1 **Load testing.** Bridges, piers and wharfs used for fire apparatus access
14 shall be load tested to the original designed capacity when required by the Fire Code
15 Official.

16
17 Section 503.4 of Chapter 5 is amended by adding a sentence thereto to read as follows:

18
19 Any vehicle or other obstruction may be towed away at the owner's expense.

20
21 Section 503.4 is renumbered to 503.4.1 and Section 503.4.2 is hereby added to read as follows:

22
23 503.4.2 **Prohibition on Vehicular Parking on Private Access ways.** If, in the judgment
24 of the Fire Code Official, it is necessary to prohibit vehicular parking along private
25 access ways serving existing facilities, buildings, or portions of buildings in order to keep
26 them clear and unobstructed for fire apparatus access, the Fire Code Official may issue an
27 Order to the owner, lessee or other person in charge of the premises to paint the curbs red
28 or install signs or other appropriate notices to the effect that parking is prohibited by
29 Order of the Fire Department. It shall thereafter be unlawful for such owner, lessee or
30 other person in charge of the premises to fail to install, maintain in good condition, the
31 form of notice so prescribed. When such areas are marked or signed as provided herein,
32 no person shall park a vehicle adjacent to any such curb or in the private access way
33 contrary to such markings or signs. Any vehicle so parked in the private access way may
34 be towed away at the expense of the owner of the vehicle.

35
36 Section 503.6.1 is hereby added to Chapter 5 and shall read as follows:

37
38 503.6.1 **Width.** All gates shall open fully to provide an unobstructed passage width of not
39 less than 16 feet or a minimum of two feet wider than the approved net clear opening of
40 the required all weather roadway or driveway and a minimum net vertical clearance of 13
41 feet 6 inches.

42
43 Section 503.6.2 is hereby added to Chapter 5 and shall read as follows:

44
45 Section 503.6.2 **Electronic Gates.** All electronic operated gates shall have installed an
46 approved key switch override system mounted on a stanchion or wall as approved by the

1 Fire Code Official in accordance with Standards adopted by the Fire Code Official. All
2 electronic or motorized gates shall incorporate in their design the means for fast, effective
3 manual operation of the gates in the event of power or mechanical failure (i.e., easily
4 removable hinge pins for separating power linkage from gates; undercut, weakened or
5 frangible members requiring 40 pounds or less pressure against the gates to cause their
6 failure and the gates to open. All electrical wiring and components of motorized gates
7 shall be UL listed and installed in accordance with the National Electric Code.
8

9 Section 506.1 of Chapter 5 is hereby amended to read as follows:
10

11 Section 506.1 **Key Entry Systems.** When access to or within a structure or an area is
12 unduly difficult because of secured openings or where immediate access is necessary for
13 life-saving or firefighting purposes or in commercial structures that have an automatic
14 fire sprinkler or fire alarm system installed, the Fire Code Official is authorized to require
15 a key entry system to be installed in an approved location. The key entry system shall be
16 of an approved type and if it is a box shall contain keys necessary to gain access as
17 required by the Fire Code Official.
18

19 Section 507.5.1 is hereby amended to read as follows and by deleting the Exception:
20

21 Section 507.5.1 **Where Required.** Where a portion of the facility or building hereafter
22 constructed or moved into or within the jurisdiction is more than 350 feet from a hydrant
23 on a fire apparatus access road, as measured by an approved route around the exterior of
24 the facility or building, on-site fire hydrants and mains shall be provided where required
25 by the Fire Code Official.
26

27 Section 507.5.7 is hereby added to Chapter 5 and shall read as follows:
28

29 Section 507.5.7 **Fire hydrant upgrades.** When additions or modifications to structures
30 are made, the nearest fire hydrant (if a new one is not required) located by the Fire Code
31 Official, shall be upgraded to the minimum standard of one 4 1/2" outlet and one 2 1/2"
32 outlet for single family dwellings and the minimum standard of one 4 1/2" outlet and two
33 2 1/2" outlets for commercial structures.
34

35 Exception: If the cost of upgrading the fire hydrant exceeds 2% of the cost of the project
36 based on the building permit valuation.
37

38 Section 605.11 is hereby added to Chapter 6 and shall read as follows:
39

40 Section 605.11 **Alternative Power Supplies.** The use of an electrical power supply,
41 (including but not limited to; photovoltaic, wind, geothermal or fuel fired generators)
42 other than the community's commercial source, currently Pacific Gas and Electric, shall
43 comply with section 605.11.1 through 605.11.3.
44

45 605.11.1. **Disconnect.** The electrical service disconnect for the alternative power supply
46 shall be located within eight feet from the P. G. & E. electrical service disconnect on the

1 same or an adjacent exterior wall. The disconnect shall be accessible to emergency
2 personnel from the exterior without the use of ladders or other special
3 equipment.

4
5 Exception: Enphase or similar technology for solar equipment that de-energizes
6 the system at the roof panels upon loss of A/C reference leaving no energized
7 electrical potential inside the structure when the main breaker is tripped.

8
9 605.11.2. **Warning Sign.** The following wording shall placed on a permanent sign
10 attached at the main electrical disconnect from P.G. & E. The sign shall be red
11 background with white letters or a white background with red letters. Minimum
12 size 2-1/2" X 6" with a minimum 22pt. font. Minimum size example below.
13

WARNING:
**This building supplied with an alternative power
source. Alternate disconnect is:**
[describe location - on the right, below etc.]
of this main disconnect. Both must be used.

14
15 605.11.3. **Required conduit.** All wiring that may contain electrical potential when the
16 alternate service disconnect has been activated, (such as the wiring between the solar
17 arrays and the DC electrical disconnect on a photovoltaic system) shall be completely
18 contained in metal conduit.

19
20 Section 901.7 of Chapter 9 is hereby amended by adding the following sentence:

21
22 This section shall also apply to residential fire sprinkler systems.

23
24 Section 903.2 Of Chapter 9 is hereby amended to read as follows:

25
26 Section 903.2 **Where Required.** All Occupancies and Facilities. An automatic fire
27 sprinkler system shall be installed in all of the following:

- 28
29 1. Every newly constructed building and facility.

30
31 Exceptions:

- 32 a. Free standing Group U Occupancies not more than 1,000 square feet
33 and provided with exterior wall and opening protection as per Table 602
34 of the Building Code.
35

1 b. Agricultural buildings as defined in Appendix C of the Building Code
2 and not exceeding 2,000 square feet, having clear unobstructed side yard
3 of combustible materials, exceeding 60 feet in all directions and not
4 exceeding 25 feet in height, and located within the Open Space Zoning
5 District as defined in Title 10 -- Zoning Ordinance.
6

7 2. In newly created second units.
8

9 3. In all buildings which have more than fifty per cent (50%) floor area added or
10 any "substantial remodel" as defined in this code, within any 36 month period.
11 Exceptions may be granted by the Fire Code Official when alternate means of
12 protection are installed as approved by the Fire Code Official.
13

14 4. In all buildings except R-3 occupancies, in excess of 3,000 sq. ft. which have
15 more than ten per cent (10%) floor area added within any 36 month period.
16 Exceptions may be granted by the Chief when alternate means of protection are
17 installed as approved by the Fire Code Official.
18

19 5. A change in the use of a structure that results in a higher fire or life safety
20 exposure when the square footage of the area changing use is more than 50% of
21 the square footage of the building.
22

23 Section 903.3 Of Chapter 9 is hereby amended by adding the following thereto:
24

25 The requirements for fire sprinklers in this code section are not meant to disallow the
26 provisions for area increase, height increase, or Fire-Resistive substitution if otherwise
27 allowed by sections 504 and 506 of the Building Code. All automatic fire sprinkler
28 systems shall be installed in accordance with the written standards of the Fire Code
29 Official and the following:

30 a. In all residential buildings required to be sprinkled any attached garages shall
31 also be sprinkled, and except for single family dwellings, in all residential
32 occupancies the attics shall be sprinkled.
33

34 b. In all existing buildings, where fire sprinklers are required by provisions of this
35 code, they shall be extended into all unprotected areas of the building.
36

37 c. All single family dwellings in excess of 5,000 square feet shall have automatic
38 fire sprinkler systems designed in accordance with NFPA Standard 13 or 13R.
39

40 d. All public storage facilities shall have installed an approved automatic fire
41 sprinkler system. An approved wire mesh or other approved physical barrier shall
42 be installed 18 inches below the sprinkler head deflector to prevent storage from
43 being placed to within 18 inches from the bottom of the deflector measured at a
44 horizontal plane.
45

1 Section 907.2.11 of Chapter 9 is hereby amended by changing the first sentence of the exception
2 to read as follows:

3
4 **EXCEPTION:** For group R occupancies other than single family dwellings.

5
6 Section 906.11 is hereby added to Chapter 9 and shall read as follows:

7
8 Section 906.11 **Fire Extinguisher Documentation.** The owner and/or operator of every
9 Group R Division 1 and R Division 2 occupancies shall annually provide the Fire Code
10 Official written documentation that fire extinguishers are installed and have been
11 serviced as required by Title 19 California Code of Regulations when such extinguishers
12 are installed in residential units in lieu of common areas.

13
14 Section 907.9.5.1 is hereby added to Chapter 9 and shall read as follows:

15
16 Section 907.9.5.1 **Smoke Alarm Documentation.** The owner and/or operator of every
17 Group R Division 1, Division 2, Division 3.1, and Division 4 Occupancies shall annually
18 provide the Fire Code Official with written documentation that the smoke alarms
19 installed pursuant to the Building Code have been tested and are operational. If alarms
20 are found to be inoperable or are missing, such alarms shall be repaired or replaced
21 immediately.

22
23 Section 4906.2 paragraph 2 of Chapter 49 is amended to read as follows:

24
25 2. Land designated as a Wildland-Urban Interface Area by the City of Sausalito to be at a
26 significant risk from wildfires and lands designated as Very-High Fire Hazard Severity
27 Zones by the City of Sausalito.

28
29 Section 4907.1 of Chapter 49 is amended to read as follows:

30
31 Section 4907.1 **General.** Defensible space will be maintained around all buildings and
32 structures in State Responsibility Area (SRA) as required in Public Resources Code 4290
33 and "SRA Fire Safe Regulations" California Code of Regulations, Title 14 Division 1.5,
34 Chapter 7, Subchapter 2, Section 1270.

35
36 Buildings and structures within the Wildland-Urban Interface Area as designated by the
37 local enforcing agency to be at a significant risk from wildfires and Very-High Fire
38 Hazard Severity Zones of a local responsibility areas (LRA) shall maintain defensible
39 space as outlined in Government Code 51175-51189, and any local ordinance or standard
40 published by the Fire Code Official.

41
42 Section 4907.2 is hereby added to Chapter 49 and shall read as follows:

43
44 Section 4907.2 **Fire Hazard Reduction.** Any person who owns, leases, controls or
45 maintains any building or structure and lands within specific Wildland Urban Interface
46 areas of the jurisdiction of the City of Sausalito, shall comply with the following: Cut

1 and remove all pyrophytic combustible vegetation within 30 feet of structures, up to 150
2 feet when topographic or pyrophytic vegetative types necessitate removal as determined
3 by the Fire Code Official. Remove piles of accumulated dead vegetation on the property.
4 Cut and remove tree limbs that overhang wood decks and roofs. Remove that portion of
5 any tree which extends within 10 feet of any chimney or stovepipe. Clean any leaves and
6 needles from roof and gutters. Cut and remove growth less than 3-inches in diameter,
7 from the ground up to a maximum height of 10 feet, provided that no crown shall be
8 raised to a point so as to remove branches from more than the lower one-third of the
9 tree's total height.

10
11 **EXCEPTION 1:** When approved by the Fire Code Official, single specimens of
12 trees, ornamental shrubbery or similar plants used as ground covers, provided that
13 they do not form a means of rapidly transmitting fire from the native growth to
14 any structure.

15
16 **EXCEPTION 2:** When approved by the Fire Code Official, grass and other
17 vegetation located more than 30 feet (9144 mm) from buildings or structures less
18 than 18 inches (457 mm) in height above the ground need not be removed where
19 necessary to stabilize soil, and prevent erosion.

20
21 Section A104.7.2 of Appendix A of the International Wildland-Urban Interface Code is amended
22 to read as follows:

23
24 Section A104.7.2 **Permits.** The Fire Code Official is authorized to stipulate conditions
25 for permits. Permits shall not be issued when public safety would be at risk, as
26 determined by the Fire Code Official.

27
28 Section A104.11 is hereby added to Appendix A of the International Wildland-Urban Interface
29 Code and shall read as follows:

30
31 Section A104.11 – **TRACER BULLETS, TRACER CHARGES, ROCKETS AND**
32 **MODEL AIRCRAFT.** Tracer bullets and tracer charges shall not be possessed, fired or
33 caused to be fired into or across hazardous fire areas. Rockets, model planes, gliders and
34 balloons powered with an engine, propellant or other feature liable to start or cause a fire
35 shall not be fired or projected into or across hazardous fire areas.

36
37 Section A104.12 is hereby added to Appendix A of the International Wildland-Urban Interface
38 Code and shall read as follows:

39
40 Section A104.12 **EXPLOSIVES AND BLASTING.** Explosives shall not be possessed,
41 kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed
42 of within hazardous fire areas except by permit from the Fire Code Official.

43
44 Section A104.13 is hereby added to Appendix A of the International Wildland-Urban Interface
45 Code and shall read as follows:

1 Section 104.13 **APAIRIES.** Lighted or smoldering material shall not be used in
2 connection with smoking bees in or upon hazardous fire areas except by permit from the
3 Fire Code Official.
4

5 **8.40.120 Authority to Arrest and Issue Citations.**
6

7 (a) The Fire Chief, Chief Officers, Fire Marshal, Deputy Fire Marshal, and Fire
8 Inspectors shall have authority to arrest or to cite any person who violates any provision of this
9 Chapter involving the Fire Code or the California Building Standards Code regulations relating
10 to fire and panic safety as adopted by the State Fire Marshal, in the manner provided for the
11 arrest or release on citation and notice to appear with respect to misdemeanors or infractions, as
12 prescribed by Chapters 5, 5c and 5d of Title 3, Part 2 of the California Penal Code, including
13 Section 853.6, or as the same hereafter may be amended.
14

15 (b) It is the intent of the City Council of the City of Sausalito that the
16 immunities provided in Penal Code Section 836.5 be applicable to aforementioned officers and
17 employees exercising their arrest or citation authority within the course and scope of their
18 employment pursuant to this Chapter.
19

20 **8.40.130 Penalties.**
21

22 (a) The violations of the Fire Code as adopted herein are
23 misdemeanors/infractions and are subject to the penalties set forth herein.
24

25 (b) If a criminal citation is issued, penalties shall be per Section 108, 109, or
26 111 of this code. If an administrative citation is issued, the penalties are as follows:
27

28 (c) The first citation, within a 12-month period, for violations of the Fire Code
29 and any amendments adopted herein shall be treated as a Civil Penalty payable directly to the
30 City of Sausalito and is set at \$150 plus the actual costs of all inspections required to gain
31 compliance at the rate set from time to time by the City Council of the City of Sausalito. Said
32 civil penalties shall be a debt owed to the City by the person responsible for the violation within
33 thirty (30) days after the date of mailing of the citation unless an appeal is filed as provided in
34 Section 11. Upon failure to pay the civil penalty when due, the responsible person shall be liable
35 in a civil action brought by the City for such civil penalty and costs of the litigation, including
36 reasonable attorney's fees.
37

38 (d) Any subsequent citations within a twelve (12) month period for any
39 violations of the Fire Code and any amendments adopted herein shall be
40 misdemeanors/infractions, and shall be subject to the penalties set forth herein.
41

42 (e) The imposition of one penalty for any violation shall not excuse the
43 violation or permit it to continue and all such persons shall be required to correct or remedy such
44 violations or defects within a reasonable time and, when not otherwise specified each day that a
45 violation occurs or continues, after a final notice has been delivered shall constitute a separate

1 offense. The application of both penalties shall not be held to prevent the enforced correction of
2 prohibited conditions.

3
4 (f) Nothing contained in Subsections (a) through (f) of this Section shall be
5 construed or interpreted to prevent the City from recovering all costs associated with a Fire
6 District response as described in Section 104.12 of the 2009 International Fire Code as amended.

7
8 (g) Any violation of any provision of this Chapter shall constitute a public
9 nuisance and shall entitle the City of Sausalito to collect the costs of abatement and related
10 administrative costs by a nuisance abatement lien as more particularly set forth in Government
11 Code Section 38773.1, and by special assessment to be collected by the County Tax Collector as
12 more particularly set forth in Government Code Section 38773.5. At least thirty (30) days prior
13 to recordation of the lien, or submission of the report to the Tax Collector for collection of this
14 special assessment, the record owner shall receive notice from the Fire Chief of intent to charge
15 the property owner for all administrative costs associated with enforcement of this Ordinance
16 and abatement of the nuisance. The notice shall include a summary of costs associated with
17 enforcement of this Ordinance and abatement of the nuisance. The property owner may appeal
18 the Chief's decision to the City Council of the City of Sausalito within fifteen (15) days of the
19 date of the notice and request a public hearing prior to recordation of the lien or submission of
20 the report to the County Tax Collector for collection of the special assessment. In addition to the
21 foregoing, the City is authorized to prosecute a civil action to collect such abatement costs from
22 the property owner or other person in possession or control of the affected property, and shall be
23 entitled to recover such abatement costs, together with the cost of litigation, including reasonable
24 attorney's fees. The provisions of this section shall also apply to corrective actions for the
25 clearance of brush or vegetative growth from structures as outlined in section 109.3.2

26
27 **8.40.140 Appeals.**

28
29 (a) Any person receiving a citation for a civil penalty pursuant to Subsection
30 (b) of Section 13 or a bill for Fire Department response costs and expenses pursuant to Section
31 104.12 of the Fire Code, may file within thirty (30) days after the date of mailing the citation or
32 bill, an administrative appeal against imposition of the civil penalty or response costs and
33 expense. The appeal shall be in writing and filed with the Fire Chief, and shall include a copy of
34 the bill and statement of the grounds for appeal. The Fire Chief shall conduct an administrative
35 hearing on the appeal, after giving the appellant at least ten (10) days' advance written notice of
36 the time and place of the hearing. Within ten (10) days after the hearing the Chief shall give
37 written notice of the decision to the appellant, which decision shall be final. If the appeal is
38 denied in part or full, all amounts due shall be paid within thirty (30) days after the mailing of the
39 notice of the decision of the hearing officer.

40
41 (b) Whenever the Chief shall disapprove an application or refuse to grant a
42 permit applied for, or when it is claimed that the provisions of the code do not apply or that the
43 true intent and meaning of the code have been misconstrued or wrongly interpreted, the applicant
44 may appeal from the decision of the Chief to the City Council of the City of Sausalito within 10
45 days from the date of the decision. The provision of this section shall not apply to corrective
46 actions for the clearance of brush or vegetative growth from structures as outlined in various

1 sections of this Code, or to matters for which an appeal is provided pursuant to Section 14 (a)
2 above.

3
4 **SECTION 2. FORMER ORDINANCES**

5
6 All former ordinances or parts thereof conflicting or inconsistent with the
7 provisions of this Ordinance or the Code hereby adopted are hereby repealed.
8

9
10 **SECTION 3. VALIDITY**

11
12 If any section, subsection, sentence, clause or phrase of this ordinance is for any
13 reason held to be invalid, such decision shall not affect the validity of the remaining portion of
14 this Ordinance. The City Council of the City of Sausalito hereby declares that it would have
15 adopted the Ordinance and each section, subsection, sentence, clause or phrase thereof,
16 irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrase
17 thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or
18 phrases shall be declared invalid.
19

20 **SECTION 4. ORDINANCE PUBLICATION AND EFFECTIVE DATE**

21
22 A summary of this Ordinance shall be published and a certified copy of the full
23 text of this Ordinance shall be posted in the office of the City Clerk at least five (5) days prior to
24 the City Council meeting at which it is adopted.
25

26 This Ordinance shall be in full force and effective thirty (30) days after its final
27 passage, and the summary of this Ordinance shall be published within fifteen (15) days after the
28 adoption, together with the names of the City Council members voting for or against same, in the
29 Marin Scope, a newspaper of general circulation in the City of Sausalito.
30

31 **SECTION 5. CALIFORNIA ENVIRONMENTAL QUALITY ACT**

32
33 The City Council of the City of Sausalito finds that adoption of this ordinance is
34 exempt from the California Environmental Quality Act ("CEQA") under California Code of
35 Regulations, Title 14, § 15061(b)(3).
36

5A
21

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SECTION 6. This Ordinance shall be published once within fifteen (15) days after its passage and adoption in a newspaper of general circulation in the City of Sausalito.

THE FOREGOING ORDINANCE was read at a regular meeting of the Sausalito City Council on the day , 2010, and was adopted at a regular meeting of the City Council on the day of , 2010 by the following vote:

- AYES:** Councilmembers:
- NOES:** Councilmembers:
- ABTAIN:** Councilmembers:
- ABSENT:** Councilmembers:

MAYOR OF THE CITY OF SAUSALITO

ATTEST:

CITY CLERK

5A
22

RESOLUTION NO. XXXX

A RESOLUTION OF THE SAUSALITO CITY COUNCIL
IDENTIFYING LOCAL CONDITIONS REQUIRING CHANGES AND MODIFICATIONS TO
2010 CALIFORNIA FIRE CODE, 2009 INTERNATIONAL FIRE CODE, AND
2009 INTERNATIONAL WILDLAND-URBAN INTERFACE CODE
(ZOA 10-360)

WHEREAS, California Health and Safety Code Sections 17958.5, 17958.7 and 18941.5 provide that a local agency may make changes to the California Building Standards Code so long as the local government makes a factual showing of unique climatic, geological, or topographical conditions; and

WHEREAS, Health and Safety Code Section 17958.7 also requires that the Building Standards Code change or modification be expressly marked and identified as to which each finding or condition refers.

WHEREAS, the City Council has concurrently adopted Ordinance No. 1203 which adopted the 2010 California Fire Code, the 2009 International Fire Code and Appendix A of the 2009 International Wildland-Urban Interface Code, with certain changes and modifications.

NOW, THEREFORE, THE CITY COUNCIL HEREBY RESOLVES AS FOLLOWS:

SECTION 1. The local and unique conditions described in the attached Exhibit A are present in Sausalito and have an adverse effect on the prevention of major loss fires and major earthquake damage, as well as the potential for life and property loss, making necessary changes or modifications to the 2010 California Fire Code, 2009 International Fire Code, and Appendix A of the 2009 International Wildland-Urban Interface Code in order to provide a reasonable degree of property security and fire and life safety in the City of Sausalito.

SECTION 2. The finding(s) or condition(s) for each change or modifications of the 2010 California Fire Code, 2009 International Fire Code, and Appendix A of the 2009 International Wildland-Urban Interface Code are expressly identified in the attached Exhibit B.

RESOLUTION PASSED AND ADOPTED, at the regular meeting of the Sausalito City Council on the ___ day of _____, 2010, by the following vote:

AYES: Councilmember:
NOES: Councilmember:
ABSENT: Councilmember:
ABSTAIN: Councilmember:

MAYOR OF THE CITY OF SAUSALITO

ATTEST:

CITY CLERK

Exhibits:

A Local and Unique Climatic, Geological, or Topographical Conditions

B Findings/Conditions for Changes or Modifications

I:\CDD\PROJECTS - NON-ADDRESS\ZOA\2010\10-360 - Fire Code\CC Resolution -- Local Conditions.doc

EXHIBIT A

LOCAL AND UNIQUE CLIMATIC, GEOLOGICAL, OR TOPOGRAPHICAL CONDITIONS

1. Climatic Conditions

- a. **Precipitation.** Precipitation ranges from 15 to 42 inches per year with an average of approximately 25 inches per year. Approximately 90% fall during the months of November through April and 10% from May through October.
- b. **Relative Humidity.** Humidity generally ranges from 50% during daytime to 86% at night. It drops to 20% during the summer months and occasionally drops lower.
- c. **Temperatures.** Temperatures have been recorded as high as 104 degrees F. Average summer highs are in the 78 – 85 degree range.
- d. **Winds.** Prevailing winds are from the northwest. However, winds are experienced from virtually every direction at one time or another. Velocities are generally in the 5 – 15 mph range, gusting to 30 mph, particularly during the summer months. Strong gale-force ocean winds up to 50 mph blow over the City from the Golden Gate National Recreation Area throughout the summer months, in addition to winter storms.
- e. **Summary.** These local climatic conditions affect the acceleration, intensity, and size of fire in the community. Times of little or no rainfall, of low humidity and high temperatures create extremely hazardous conditions, particularly as they relate to wood shake and shingle roof fires and conflagrations. The winds experienced in this area can have a tremendous impact upon structure fires of buildings in close proximity to one another, commonly found in the City of Sausalito. During wood shake and shingle roof fires, or exposure fires, winds can carry sparks and burning brands to other structures, thus spreading the fire and causing conflagrations. In building fires, winds can literally force fires back into the building and can create a blowtorch effect, in addition to preventing “natural” ventilation and cross-ventilation efforts.

2. Geographic and Topographic Conditions

- a. **Geographic Factors.** The fire environment of a community is primarily a combination of two factors: the area’s physical geographic characteristics and the historic pattern of urban-suburban development. These two factors, alone and combined, create a mixture of environments which ultimately determines the area’s fire protection needs.

- i. The City Council finds Sausalito is in a unique geographic area, built upon a tree-covered 980-foot slope with an average grade of 22%. Slopes of 60% are commonplace. The City is water-bound at its base, and along its ridgeline is a national recreation area of highly combustible grass, brush, and trees, mainly eucalyptus.
 - ii. Lands in the southerly portion of the City were subdivided in 1850, and in the central and northerly portions in 1870. The structural buildup occurred between the 1880's and 1920's in many of the residential areas and the City's commercial center. The original construction consists of wood frame structures built with little or no side yard setbacks on small, narrow lots typical of that era.
 - iii. The domestic water supply is located at the terminus of the Marin Municipal Water District's distribution system and consists of five levels of gravity systems of varying pressures and capacities. Sixteen percent of the City's hydrants are rated at less than 500 gallons per minute and, therefore, are deficient for fire protection.
- b. **Seismic Location.** The relatively young geological processes that have created the San Francisco Bay Area are still active today. The City sits between two active earthquake faults (San Andreas and the Hayward/-Calaveras) and numerous potentially active faults. Approximately 50% of the City's land area is in the high-to-moderate seismic hazard zones.
- c. **Size and Population.** The City of Sausalito is composed of approximately three square miles including a permanent urban population of approximately 7,300 residents. Transient population levels vary during the summer months with special events drawing as many as 15,000 people to the City. The City is served by one fire station with 15 Fire Department personnel. The Fire Department handles diverse responsibilities including wildland, urban, freeway, air, water, and emergency paramedical.
- d. **Roads and Streets.** Most of Sausalito's street and pathway systems were laid out in the 1870's. Off-street parking is limited and therefore many of the City's streets have less than 20 feet of unobstructed width and turning radius, as required by Section 902.2.2.1 of the Uniform Fire Code. Roadways with less than 20 feet of unobstructed paved surface are considered hazardous in terms of fire access and protection.
- e. **Topography.** The City of Sausalito is a conglomeration of bay fill, steep hills, valleys, and ridges. The flatter lands are found in the central and northern portions of the City. Most of the existing urban and suburbanized areas are built on slopes ranging from 5% to 70% grades.
- i. Elevations are varied in the City with City Hall listed as 10 feet above sea level. Elevations in the Wolfback Ridge development are in the area of 980 feet above sea level.

- ii. Correspondingly, there is much diversity in slope percentages with a large percentage of homes in the 25% to 45% slope range and the average slope being 22%. Slope is an important factor in the spread of fire. As a basic rule of thumb, the rate of spread will double as the slope percentage doubles, all other factors remaining the same.
- f. **Vegetation.** Sausalito's semi-arid Mediterranean-type climate produces vegetation similar to that of most of Marin County, with specific growth locale a result of topography and prevailing winds. The south facing exposure is primarily rye grass with occasional clumps of bay and oak trees in the more sheltered pockets. The north facing slopes are heavily wooded from lower elevations to ridge with oak, bay, and eucalyptus trees and minor shrubs of the general chaparral class.
- i. Expansion of the residential community into areas of heavier vegetation has resulted in homes existing in close proximity to dense natural foliage. Often such dwellings are completely surrounded by highly combustible vegetation compounding the fire problem from a conflagration point of view.
 - ii. A large percentage of the structures in the City have costly shingle or shake roofs. This very flammable material is susceptible to ignition by embers from a wildland fire, furthering the spread of fire to adjacent buildings.
- g. **Summary.** The above listed conditions increase the magnitude, exposure, accessibility problems and fire hazards presented to the Sausalito Fire Department. The protection of life and property from fire is difficult due to limited access problems created by water, cliffs, steep slopes, and the lack of side yard setbacks, as well as the combustible structures and their roofs.
- i. Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself. A large percentage of dwellings in the City have wood shingle roofs.
 - ii. The City's industrial area is located in the highest seismic risk zones. The highest seismic risk zone also contains the largest concentration of hazardous materials. Hazardous materials could pose the greatest threat to the largest number, should a significant seismic event occur. The Fire Department's resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single-dwelling or structure fires.
 - iii. Other variables may tend to intensify the situation:
 - 1) The extent of damage to the water system;
 - 2) The extent of isolation due to bridge and/or freeway overpass collapse;

- 3) The extent of roadway damage and/or amount of debris blocking the roadways;
- 4) Climatic conditions (hot, dry weather with high winds);
- 5) Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours;
- 6) The availability of timely mutual aid or military assistance;
- 7) The portion of dwellings with wood shingle roof coverings could result in conflagrations.

Conclusion: Local climatic, geographic and topographic conditions impact fire prevention efforts, and the frequency, spread, acceleration, intensity, and size of fire involving buildings in this community. Further, they impact potential damage to all structures from earthquake and subsequent fire. Therefore it is found to be reasonably necessary that the 2010 California Fire Code, 2009 International Fire Code, and Appendix A of the 2009 International Wildland-Urban Interface Code be changed or modified to mitigate the effects of the above conditions.

EXHIBIT B

FINDINGS/CONDITIONS FOR CHANGES OR MODIFICATIONS¹

Section	Climate	Topography	Geography
1 – Administration			
<input type="checkbox"/> 102.7.1	X	X	
<input type="checkbox"/> 104.1.1	X	X	
<input type="checkbox"/> 104.1.12	X	X	
<input type="checkbox"/> 104.3	X	X	
<input type="checkbox"/> 105.6.47	X	X	
<input type="checkbox"/> 105.7.15	X	X	
<input type="checkbox"/> 109.3	X	X	
<input type="checkbox"/> 111.4	X		
2 – Definitions			
<input type="checkbox"/> 202 (F)		X	
<input type="checkbox"/> 202(S)		X	
<input type="checkbox"/> 202(T)		X	
3- General Requirements			
<input type="checkbox"/> 318	X	X	
4- Emergency Planning and Procedures			
<input type="checkbox"/> 402.1	X	X	X
<input type="checkbox"/> 408.1.1	X	X	X
5 - Fire Service Features			
<input type="checkbox"/> 501.4	X	X	X
<input type="checkbox"/> 502.1	X	X	X
<input type="checkbox"/> 503.1.4	X	X	X
<input type="checkbox"/> 503.1.5	X	X	X
<input type="checkbox"/> 503.2.6.1	X	X	X
<input type="checkbox"/> 503.4	X	X	X
<input type="checkbox"/> 503.4.2	X	X	X
<input type="checkbox"/> 503.6.1	X	X	X
<input type="checkbox"/> 503.6.2	X	X	X
<input type="checkbox"/> 506.1	X	X	X
<input type="checkbox"/> 507.5.1	X	X	X
<input type="checkbox"/> 507.5.7	X	X	X
6 - Building Services and Systems			
<input type="checkbox"/> 605.11	X	X	X
<input type="checkbox"/> 605.11.1	X	X	X

¹ Section references in this Exhibit B are to Sections of the 2010 California Fire Code with the exception of Appendix A – WUI which are references to Sections of Appendix A of the 2009 edition of the International Wildland-Urban Interface Code

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Section	Climate	Topography	Geography
<input type="checkbox"/> 605.11.2	X	X	X
<input type="checkbox"/> 605.11.3	X	X	X
9 - Fire Protection Systems			
<input type="checkbox"/> 901.7	X	X	
<input type="checkbox"/> 903.2	X	X	
<input type="checkbox"/> 903.3	X	X	
<input type="checkbox"/> 906.11	X	X	
<input type="checkbox"/> 907.2.11	X	X	
<input type="checkbox"/> 907.2.9	X	X	
49 - Requirements for WUI Areas			
<input type="checkbox"/> 4907.1	X	X	X
<input type="checkbox"/> 4907.2	X	X	X
Appendix A - WUI			
<input type="checkbox"/> A104.7.2	X	X	X
<input type="checkbox"/> A104.11	X	X	X
<input type="checkbox"/> A104.12	X	X	X
<input type="checkbox"/> A104.13	X	X	X

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