STATE OF CALIFORNIA – GOVERNMENT OPERATIONS AGENCY GOVERNOR EDMUND G. BROWN JR.

BUILDING STANDARDS COMMISSION
2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959

February 21, 2014

Tony Creter
Building Official
County of Alpine
50 Diamond Valley Road
Markleeville, CA 96120

RE: Ordinance #706-14

Dear Mr. Creter:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on January 28, 2014.

Our review finds the submittal to contain one ordinance modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modification is accepted for filing and is enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your county receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

COUNTY OF ALPINE
Community Development

Brian Peters, Director
Tony Creter, Building Official
tcreter@alpinecountyca.gov

RECEIVED
2014 JAN 28 P 4:56
CALIFORNIA BUILDING STANDARDS COMMISSION

January 22, 2014

California Building Standards Commission
2525 Natomas Park Dr., Ste. 130
Sacramento, CA 95833-2936

To the interested party,

Please be advised that the County of Alpine has recently formally adopted, by ordinance, the 2013 California Building Code, its respective appurtenances and local amendments.

Please refer to the enclosed set of adopted ordinances and respective findings.

If you should have any questions, please feel free to contact me.

Best regards,

Tony Creter
Building Official, County of Alpine

Cc; HCD

ORDINANCE NO.: 706-14

AN ORDINANCE OF THE COUNTY OF ALPINE, STATE OF CALIFORNIA, AMENDING ALPINE COUNTY CODE SECTION 15.04 (TECHNICAL BUILDING CODES), AND REPEALING ORDINANCE 696-10. ADOPTING BY REFERENCE; THE CALIFORNIA BUILDING CODE, 2013 EDITION; THE CALIFORNIA RESIDENTIAL CODE, 2013 EDITION; THE CALIFORNIA ELECTRICAL CODE, 2013 EDITION; THE CALIFORNIA MECHANICAL CODE, 2013 EDITION; THE CALIFORNIA PLUMBING CODE, 2013 EDITION; THE CALIFORNIA FIRE CODE, 2013 EDITION; THE CALIFORNIA GREEN BUILDING STANDARDS CODE, 2013 EDITION; ADOPTING REVISIONS AND ERRATAS TO SAID CODES; ADOPTING AND DELETING CERTAIN APPENDIX CHAPTERS OF SAID CODES.

WHEREAS, the California Building Standards Code is published in its entirety every three years by order of the California legislature, with supplements published in intervening years; and

WHEREAS, the California legislature delegates authority to various state agencies, boards, commissions and departments to implement the State's statutes; and

WHEREAS, these codes are adopted by the State of California and by local communities with amendments pertinent to local conditions; and

WHEREAS, to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to firefighters and emergency responders during emergency operations.

WHEREAS, local topography and climate present unique fire hazards and fire abatement conditions; and

WHEREAS, local geological conditions present unique geophysical hazards; and

WHEREAS, the Board of Supervisors of the County of Alpine finds that such local geological, topographic and climatic conditions warrant certain amendments to the model uniform codes related to construction;

NOW, THEREFORE, THE BOARD OF SUPERVISORS OF THE COUNTY OF ALPINE DOES ORDAIN AS FOLLOWS:

SECTION 1. Alpine County Ordinance 696-10 is replaced in its entirety.

*EXPRESS FINDING REFERENCES HIGHLIGHTED

SECTION 2. Section 15.04 is hereby replaced in its entirety, as follows:

Section 15.04.010: Adoption of Building Codes by Reference.

Subject to the amendments provided for in Section 3 herein, the following building code publications, certain appendix chapters and the references therein are hereby adopted by reference and incorporated into what shall be known as the Building Code of Alpine County and contained herein is comprised of the following elements:

The specified portions of the California Building Standards Codes known as California Code of Regulations, Title 24, Parts 2, 2.5, 3, 4, 5, 8, 9, 11.

A. The International Building Code, 2012 edition, as published by the International Code Council, as adopted and amended by the California Building Standards Commission, California Building Standards Code, Title 24, Part 2, Volumes 1 and 2, of the California Code of Regulations (California Building Code, 2013 edition), including only the following Appendices:

1. Appendix A - Employee Qualifications
2. Appendix C - Group U – Agricultural Buildings
3. Appendix I - Patio Covers
4. Appendix J - Grading

B. The International Residential Code, 2012 edition, as published by the International Code Council, as adopted and amended by the California Building Standards Commission, California Building Standards Code, Title 24, Part 2.5, of the California Code of Regulations (California Residential Code, 2013 edition), including only the following Appendices:

1. Appendix E - Manufactured Housing Used As Dwellings
2. Appendix G - Swimming Pools, Spas and Hot Tubs
3. Appendix H – Patio Covers

C. The National Electrical Code, 2011 edition, as published by the National Fire Protection Association, as adopted and amended by the California Building Standards Commission, California Building Standards Code, Title 24, Part 3, of the California Code of Regulations (California Electrical Code, 2013 edition).

D. The Uniform Mechanical Code, 2012 edition, as published by the International Association of Plumbing and Mechanical Officials, as adopted and amended by the California Building Standards Commission, California Building Standards Code, Title 24, Part 4, of the California Code of Regulations (California Mechanical Code, 2013 edition).

E. The Uniform Plumbing Code, 2012 edition, as published by the International Association of Plumbing and Mechanical Officials, as adopted and amended by the California Building Standards Commission, California Building Standards Code, Title 24,

Part 5, of the California Code of Regulations (California Plumbing Code, 2013 edition), including only appendices:

1. Appendix A – Recommended Rules for Sizing the Water Supply System
2. Appendix D – Sizing Storm Water Drainage Systems
3. Appendix I – Installation Standards

F. The International Fire Code, 2012 edition, as published by the National Fire Protection Association, as adopted and amended by the California Building Standards Commission, California Building Standards Code, Title 24, Part 9, of the California Code of Regulations (California Fire Code, 2013 edition), including only appendices:

1. Appendix B – Fire Flow Requirements for Buildings
2. Appendix C – Fire Hydrant Locations and Distributions
3. Appendix E – Hazard Categories

Said codes and secondary codes adopted by reference and the amendments therein are on file and available for public inspection in the office of the Building Official.

SECTION 3. Amendments to the California Building Codes:

The 2013 California Building Codes and appurtenances adopted by reference by Alpine County Ordinance – Section 15.04.020 are hereby amended (in *italics*) as follows:

The 2013 California Building Code hereafter, (CBC) *Division I & Division II:* & the 2013 California Residential Code hereafter, (CRC) *Division I & Division II:* is hereby amended as follows:

CBC 105.3.2 & CRC R105.3.2 Time limitation of application: An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such applications has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. *No application shall be extended more than once. The fee to extend an application shall be based on the prescribed fee schedule. In order to renew action on an application after expiration, the applicant shall resubmit plans and payment of a new plan review fee.*
ADMINISTRATIVE POLICY

CBC 105.5 & CRC R105.5 Expiration: Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. *If said permit has been deemed to have expired or otherwise voided, the building official may authorize the issuance of a new permit. Work shall not continue on the project until a new permit is issued and prescribed fees have been paid*

in accordance with the percentage of the level of completion which is based on the building permit fee and administrative fees.

Every permit issued by the building official under the provisions of the California Building Code shall expire and become invalid four years from the date of issuance. On permits expired for one year or more, the codes in effect at the time a new permit is issued is at the discretion and judgment of the building official and shall be the codes which apply to that permit through the point of completion or expiration.
ADMINISTRATIVE POLICY

CBC 109.4 & CRC R108.6 Work commencing before permit issuance: Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to an investigation fee that shall be in addition to the required permit fees. *A special investigation shall be made before a permit may be issued for such work.*
ADMINISTRATIVE POLICY

CBC 109.6 & CRC R108.5 Refunds: *The building official may authorize the refund of any fee paid hereafter which was erroneously paid or collected. When no work has been done under a permit issued in accordance with the code, the building official may authorize the refund of not more than 80 percent of the permit fee paid.*

The building official may authorize the refund of not more than 80 percent of the plan review fee paid when an application for a permit has been paid and is withdrawn or canceled before any plan reviewing is performed.

The building official shall not authorize the refund of any fee paid except on written application filed by the original permit holder.
ADMINISTRATIVE POLICY

CBC 111.3 & CRC R110.4 Temporary occupancy: The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. *The building official is not obliged to issue temporary certificates of occupancy. Fees for the issuance of temporary certificates of occupancy shall be as prescribed by resolution. The term of temporary occupancy is limited to 90 days. An extension of term shall be requested in writing showing that circumstances beyond the control of the applicant have prevented action from being taken. A fee for additional extensions is applicable.*
ADMINISTRATIVE POLICY

CRC R301.1.1.1 Alternative provisions for limited-density owner-built rural dwellings: *This section is hereby struck and shall not be adopted within the Building Code of Alpine County.*
ADMINISTRATIVE POLICY

CBC 1505.1.1 & CRC R902.1 Roof coverings within Very High Fire Hazard Severity Zones: *Class "A" Fire Rating is required for all new roofs and for any roof covering applied in the alteration, repair or replacement of the roof.*
EXPRESS FINDING (1b)

CBC 1505.1.2 & CRC R902.1.2 Roof coverings within State Responsibility Areas: *Class "A" Fire Rating is required for all new roofs and for any roof covering applied in the alteration, repair or replacement of the roof.*
EXPRESS FINDING (1b)

CBC 1505.1.3 & CRC R902.1.3 Roof coverings within all other areas: *Class "A" Fire Rating is required for all new roofs and for any roof covering applied in the alteration, repair or replacement of the roof.*
EXPRESS FINDING (1b)

CBC 1507.2.8.2, 1507.4.5, 1507.5.4, 1507.6.4, 1507.7.4, 1507.8.4, 1507.9.4 & CRC R905.2.7.1, R905.3.3.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1, R905.8.3.1 Ice barrier: In areas where there has been a history of ice forming along the eaves causing a backup of water as designated in Table R301.2(1) *(or below the 6200 foot elevation level)*, an ice barrier that consists of at least two layers of underlayment cemented together or a self-adhering polymer modified bitumen sheet shall be used in place of normal underlayment and extend from the lowest edges of all roof surfaces to a point at least 24 inches inside the interior wall line of the building. *(For areas above the 6200 feet elevation level, a self-adhering polymer modified bitumen sheet shall be used in place of normal underlayment and extend from the lowest edges of all roof surfaces to a point at least 72 inches inside the interior wall line of the building.*
EXPRESS FINDING (1c)

For areas above 6200 foot elevation, a "cricket" or saddle-type diverter shall be installed on the ridge side of any chimney, flue or vent that is adjacent to, or penetrates the roof. Crickets or saddle coverings shall be a minimum 24 gauge sheet metal or the same material as the roof covering. Plumbing vents through the barge rafter shall be approved by the Building Official ***prior*** *to installation, provided required clearances are maintained from windows, vents, combustion air and exhaust vents.*

CBC 1608 & CRC R301.2.3 Snow Loads: These sections are hereby amended as follows:

Site specific case studies designated as "CS"

(Pf) MINIMUM ROOF SNOW LOADS. (Pf = pounds/square foot; Hg = snow depth above grade)

AREA (Elevation)	*Pf*	*Hg*
Fredricksburg (below 5200')	*50*	
River Ranch (5100')	*50*	
Mesa Vista (elevation 5200'- 5800')	*75*	
Markleeville (5500')	*100*	
Markleevillage/Shay Creek (5600'- 5800')	*125*	
Woodfords/Hawkins Ranch Area (5500'- 5800')	*100*	
Crystal Springs (above 5800')	*125*	
Upper Woodfords Canyon (above 6200')	*200***	*9 ft. ****
Clarks Fork Canyon (above 6200')	*200***	*9 ft. ****
Hope/Faith/Charity Valleys (above 7000')	*250***	*15 ft. ****
Bear Valley/Kirkwood/Caples Lake (above 7200')	*300***	*15 ft. ****
Lake Alpine (above 7600')	*350***	*20 ft. ****

**Snow loads for areas not specified shall be determined by the Building Official.*

*** For areas with a snow load of 150 psf or greater, no stress increases are allowed per CBC 2306. (Reference National Design Specifications for Wood Construction, Section 2.3.2, Load Duration Table 2.3.2.)*

****If eave heights are less than or equal to Hg, snow load reductions are not permitted.*

Roof snow loads (Pf) may be reduced for roof slope based on the Reduced Snow Load Chart below to a maximum of 50%.

Note: For roof covering material not considered as being "slippery" (i.e. wood shakes, tile, composition shingles & roll roofing) no snow load reduction is allowed.
EXPRESS FINDING (1d, 1e)

REDUCED SNOW LOAD CHART

(Based on Roof Slope Factor "Cs" determined from ASCE 7-10 Figure 7-2b- for Cold Roofs with "Ct"= 1.1)

(Unobstructed Slippery Surfaces)

Roof Pitch	4:12	5:12	6:12	7:12	8:12	9:12	10:12	11:12	12:12	50%
Cs =	0.865	0.795	0.725	0.660	0.620	0.550	0.500	0.460	0.420	Max.
Base Design Snow Load "Pf" (psf)	Allowable Reduced Design Snow Loads									
50	43	40	36	33	31	28	25	25	25	25
75	65	60	54	50	47	41	38	38	38	38
100	87	80	73	66	62	55	50	50	50	50
125	108	99	91	83	78	69	63	63	63	63
150	130	119	109	99	93	83	75	75	75	75
175	151	139	127	116	109	96	88	88	88	88
200	173	159	145	132	124	110	100	100	100	100
225	195	179	163	149	140	124	113	113	113	113
250	216	199	181	165	155	138	125	125	125	125
275	238	219	199	182	171	151	138	138	138	138
300	260	239	218	198	186	165	150	150	150	150
325	281	258	236	215	202	179	163	163	163	163

EXPRESS FINDING (1d, 1e)

CBC 1609.3 (Basic Wind Speed) and CRC R301.2.1 (Wind design criteria): These sections are hereby amended to add as follows: *Alpine County is designated to be within a special wind region. In certain areas, such as mountain tops and canyons, the ultimate design wind speed is higher, as determined by case studies and the approval of the building official.*

The ultimate design and basic wind speeds are as follows:

	Alpine County		*Mesa Vista and River Ranch Area*	
CBC 1609.3 (Ultimate wind speed, Vult)	*Risk Category*	*Vult (mph)*	*Risk Category*	*Vult (mph)*
	I	*110*	*I*	*115*
	II	*130*	*II*	*140*
	III or IV	*140*	*III or IV*	*150*
CRC R301.2.1 (Basic wind speed)	*100*		*105*	

EXPRESS FINDING (3a)

CBC 1803.1.1.1 Preliminary soils report: Each city, county, or city and county shall enact an ordinance which requires a preliminary soils report, prepared by a civil engineer who is registered by the state. The report shall be based upon adequate test borings or excavations, of every subdivision, where a tentative and final map is required pursuant to Section 66426 of the Government Code. *The County of Alpine hereby formally adopts this section within the body of this ordinance.*

CBC 1803.2 Geotechnical Investigations: is hereby amended as follows: *Projects with specialized foundation systems, i.e. retaining walls or drilled piers, may require a geotechnical investigation as determined by the building official.*

CBC 1809.4 Depth and width of footings & CRC R403.1.4 Minimum depth: is hereby amended as follows: *The minimum depth of exterior footings shall be at least 18 inches below the undisturbed ground surface or erected on solid rock. The minimum depth of interior footings shall be at least 12 inches below the undisturbed ground surface or erected on solid rock.*

EXPRESS FINDING (2a-f)

The 2013 California Plumbing Code, hereafter (CPC) is hereby amended, as follows:

CPC 604.1.2 Materials: *The installation and use of cross-linked polyethylene (PEX) piping is considered by the County of Alpine to be an "Alternate Material and Method" and, pursuant to CPC 1.8.7.2, shall be subject to approval by the building official on a case-by-case basis. The applicant or their contractor shall provide the following information and receive approval from the building official* ***prior*** *to installation:*

1. Complete the PEX Certification Form noting: proposed PEX product, name of installer, copy of product installer's certification of training for the proposed PEX product and acceptance of fill and flush requirements of CPC 604.1.2

2. The use of PEX-AL-PEX is not adopted.
ADMINISTRATIVE POLICY

CPC 609.2 Water supply, Installation: wherein it states: "...*Building supply yard piping shall not be less than twelve (12) inches below the average local frost depth. The cover shall not be less than twelve (12) inches below finish grade." *hereby shall be struck and replaced with:

1. The main water service line shall be installed to a minimum depth of 36 inches below grade.

2. Under floor domestic water and hydronic supply/return piping shall be insulated with appropriate pipe wrapping per manufacturer specifications and in accordance with the requirements of the California Energy Code.

3. For elevations above 6200', a water shut-off valve shall be installed inside of structure with a back drain and a main shut off valve placed outside of the structure with a gate valve.
EXPRESS FINDING (1a, 1f)

CPC 901.1 Vents required: is hereby added: *The installation of air admittance valves shall require the **prior** approval of the building official.*
ADMINISTRATIVE POLICY

CPC 906.1 Roof termination: is hereby added: *A cricket or saddle-type diverter shall be installed on the ridge side of any chimney, flue or vent that is adjacent to, or penetrates the roof. Crickets or saddle coverings shall be a minimum 24 gauge sheet metal or the same material as the roof covering. Plumbing vents through the barge rafter shall be approved by the Building Official **prior** to installation, provided adequate clearances are maintained from windows, vents, combustion air and exhaust vents.*
EXPRESS FINDING (1c)

The 2013 California Mechanical Code, hereafter (CMC) is hereby amended as follows:

CMC 303.8.1 Liquefied Petroleum Gas Appliances: ***Liquefied petroleum gas-burning appliances shall not be installed in a pit, basement, or similar location where heavier-than-air gas might collect.*** Appliances so fueled shall not be installed in an above-grade under-floor space or basement unless such location is provided with an approved means for removal of unburned gas *and a combustible gas detector/alarm. The alarm(s) shall be audible to not less than 70 decibels within the lowest floor level of habitable spaces. Combustible gas alarms shall be installed in accordance with the approved manufacturer's instructions and shall be listed with a recognized testing agency.*
Combustible gas alarms shall receive their primary power from the building wiring. Wiring shall be permanent and without a disconnect switch other than as required for overcurrent protection.
EXPRESS FINDING (1f, 1g)

The 2013 California Fire Code, hereafter (CFC) is hereby amended as follows:
EXPRESS FINDING (SPECIAL CONDITIONS a, b, c)

CFC 113.3 Work commencing before permit issuance: *Any person who commences any work on a fire protection or fire alarm system before obtaining the necessary permits shall be subject to an investigation fee that shall be in addition to the required permit fees. A special investigation shall be made before a permit may be issued for such work.*

CFC 113.2 Schedule of permit fees: A fee for each permit shall be paid as required, in accordance with the schedules as established *by Alpine County resolution pertaining to Community Development permits and fees.*

CFC 202 General Definitions: Fire Code Official: The fire chief or *chief building official* charged with the administration and enforcement of the code, or duly authorized representative.

CFC 903.3 Installation requirements: is hereby amended with the addition of *CFC 903.3.9 Fire Control Room: An approved fire control room shall be provided for all buildings protected by an automatic fire extinguishing system. Said room shall contain all fire sprinkler main risers, system control valves, fire alarm control panels and other fire equipment required by the fire code official. Fire control rooms shall be located within the building at a location approved by the fire code official, and shall be provided with a means to access the room directly from the exterior or a corridor built with 1 hour fire resistive construction. Durable signage shall be provided on the exterior side of the access door to identify the fire control room.*

Where access as noted above cannot be provided, a listed post indicator valve shall be provided at least 10' from the building to control the water supply to the fire sprinkler system. A wall mount indicating valve is permissible provided it is accessible with no combustible building construction within 10' of said valve and through a non-combustible wall.

Exception: 1 and 2 family dwellings protected by an NFPA 13D designed system.

CFC 903.4.1 Monitoring: Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an approved *U.L. listed central station and* shall sound an audible signal *at the protected premises.*

CFC 6104 Location of LP-gas Containers: is amended with the addition of *CFC 6104.3.3: LP-gas containers (propane tanks) are required to be placed on a minimum 3 inch thick concrete or masonry foundation and anchored with seismic restraints or utility supplied saddles. For elevations above 6200 feet, LP-gas containers shall have an approved snow protective structure built over the container(s). Protective structures shall be designed to meet the design criteria requirements for the specific location including ignition resistant building materials as found in CBC chapter 7A. All regulators, meters and gas lines entering the building shall be substantially protected from snow and ice damage.*
EXPRESS FINDING (1e, 1f)

SECTION 4. Special Conditions 15.04.030

Alpine County Code Section 13.08.040 Building Permit: The building official shall not issue a building permit for the construction of any new building or structure requiring the use of potable water and sewage in the County without the written approval of the County Environmental Health Specialist or District having jurisdiction expressing that the water and sewage systems are approved as to their respective standards. ADMINISTRATIVE CLARIFICATION

SECTION 5. Violations 15.04.040

It is unlawful for any persons, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish, connect electrical, fuel or gas services, or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any provisions of this code. The building official is authorized to serve a notice of violation or order to the person(s) responsible under the provisions of this code. Any person who violates the provisions of the notice or order shall be subject to penalties as prescribed by law.

Validity: If any chapter, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

SECTION 6. Effective Date

~~This ordinance, with the names of the members of the Board of Supervisors voting for~~ or against the same, shall become effective and in full force and effect at 12:01 a.m. on January 7, 2014, and before expiration of fifteen (15) days after its passage, shall be posted in a prominent location at the Board of Supervisors' chambers and remain posted thereafter for at least one week.

Passed and adopted this 7th day of January, 2014 at Markleeville, California, by the following vote:

AYES:

NOES:

ABSENT:

Don Jardine, Chair, Board of Supervisors
County of Alpine, State of California

ATTEST:

Barbara Howard, County Clerk &
ex Officio Clerk to the Board of Supervisors
County of Alpine, State of California

APPROVED AS TO FORM:

David Prentice, County Counsel
County of Alpine

SECTION 5. Violations 15.04.040

It is unlawful for any persons, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish, connect electrical, fuel or gas services, or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any provisions of this code. The building official is authorized to serve a notice of violation or order to the person(s) responsible under the provisions of this code. Any person who violates the provisions of the notice or order shall be subject to penalties as prescribed by law.

Validity: If any chapter, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

SECTION 6. Effective Date

This ordinance, with the names of the members of the Board of Supervisors voting for or against the same, shall become effective and in full force and effect at 12:01 a.m. on January 7, 2014, and before expiration of fifteen (15) days after its passage, shall be posted in a prominent location at the Board of Supervisors' chambers and remain posted thereafter for at least one week.

Passed and adopted this 7th day of January, 2014 at Markleeville, California, by the following vote:

AYES: Supervisors Jardine, Hames, Rakow, Woodrow, Rawson

NOES: None

ABSENT: None

Donald M. Jardine, Chair, Board of Supervisors
County of Alpine, State of California

ATTEST:

Barbara Howard, County Clerk &
ex Officio Clerk to the Board of Supervisors
County of Alpine, State of California
By: Teola Tremayne, Asst. County Clerk

APPROVED AS TO FORM:

David Prentice, County Counsel
County of Alpine

2013 Alpine County Building Code Amendment Findings

The Board of Supervisors of the County of Alpine finds and declares that the additions and modifications made to the 2013 County of Alpine – Building Code are considered to be reasonable and necessary for the protection of public health, safety and welfare due to local climatic, geological or topographical conditions. These amendments are authorized under California Health and Safety Code Sections 17958.5, 17958.7 and 18941.5 and are identified as follows:

1. EXPRESS FINDING: Climatic.

(a) Alpine County's climate lies in a transitional zone between the central Sierra Nevada crest and the southeast slope of the Carson Valley. The climate varies significantly due to differences in elevation. Elevations range between 5,000 feet and 10,000 feet above sea level. Typical temperatures in the lower elevations range from a low in the single digit degrees in winter, to a high exceeding 100 degrees in summer. Typical temperatures in the higher elevations range from 20 degrees below zero in winter, to a high exceeding 80 degrees in summer. The micro-climate of the lower elevations is typically arid. The micro-climate of the higher elevations is typically semi-arid in summer with the probability of significant precipitation in the form of rain and snow in winter. Due to the sub-zero temperatures common in winter months, "frost depths" have been designated at 18 inches below grade as further detailed in amendments to California Building Code (CBC) Section 1809.4 & California Residential Code (CRC) Section R403.1.4. California Plumbing Code (CPC) Section 609.2 has been amended to require that exterior installations of water lines be located at 36 inches below grade. In addition, under-floor water and radiant hydronic heat piping require insulation pursuant to the requirements of the California Energy Code.

(b) The effects of climate present great impacts to fire behavior and other emergency events. In the summer months, the drying out and degradation of wood shingles and wild land fuels allows for easy ignition. Low humidity and summer winds, coupled with seasonal "dry lightning" events create a scenario that may lead to brush fires. Uncontrolled and/or illegal campfires are also a contributing factor. Alpine County is comprised of 96% undeveloped public lands. The remainder lies within the Wildland –Urban Interface. The vast majority of non-federal land in Alpine County is designated by the State Board of Forestry and Fire Protection as a State Responsibility Area (SRA) which include High Fire Hazard Severity Zones and Very High Fire Hazard Severity Zones. The requirement for Class "A" roof assemblies, as amended to CBC Section 1505 and CRC Section 902, will aid in the protection of structures from exposures to wildfire embers.

(c) In winter, the higher elevations are affected by significant snowfall. Buildings located in the middle to higher elevations (areas above 6200 feet) of Alpine County have a history of ice forming along the eaves causing a backup of water. Buildings where the roofs have been constructed without a method to shield against water intrusion due to "ice dams" typically suffer moderate to significant water damage. The requirements for an ice barrier, as amended to California Building Code (CBC) Section 1507 and California Residential Code (CRC) Section 905, will aid in the protection of structures from significant water damage due to ice dams.

(d) Considerations of elevation, snow load, load duration factor, roof live load and other load combinations such as seismic and wind loads are important elements in the design of structurally sound buildings in Alpine County. Projects submitted for structural design review in Alpine County are required to account for applicable load combinations, snow loads and lateral design reductions in CBC Section 1605.- Load Combinations and CBC1608 - Snow Loads. The ground snow load or design snow load for roofs shall conform to the adopted ordinance in accordance with the aforementioned codes and American Society of Civil Engineers (ASCE) 7-10, but shall not be less than that determined by CBC Section 1608.

(e) The primary weather influence comes from the Pacific Ocean in what is known as the "Belt of the Westerlies". The furthest eastern portion of Alpine County is affected by the geographical rain shadow effect of the Sierra Nevada crest. In winter, the higher elevations are affected by significant snowfall. Average snowfall amounts are approximately 400 inches per year, often recorded as the deepest snowpack in North America. As is typical in the northern Sierra Nevada, the moisture content of the accumulated snow is moderate to high. The variations in temperature along the Sierra Nevada crest may cause a degree of alternate freeze/thaw cycles of the snowpack. During the course of a typical winter, a sub-tropical rain event may occur, leading to an increasingly heavier snowpack. This heavy mixture, locally known as "Sierra Cement", imposes a load factor that is necessary to take into account for structural building design. The ground snow loads in determining the design snow loads for roofs are in accordance with ASCE 7-10 and site-specific case studies (CS) based on accepted historic hydrologic studies and snow surveys in accordance with CBC Section 1608.2. CBC Table 1608.2 has been modified to show the area/site specific elevations, basic roof snow loads in pounds per square foot (Pf) and eave height above grade (Hg).

(f) Elevations above 6200 feet are known to accumulate several feet of snow during the course of a normal winter. In communities such as Bear Valley and Kirkwood, it is not uncommon for the snowpack to achieve a depth of ten feet or more. The location and maintenance of items such as water and gas valves are difficult under these conditions. Therefore, CPC Section 606.6 has been amended to require an additional water supply valve within the building.

(g) Alpine County is not presently served by a natural gas supply infrastructure. LP-Gas installations are the norm for fuel supplies. A low percentage of LP-Gas containers are installed underground. Most installations of new LP-Gas containers are constructed above ground. Heavy winter snows and ice buildup have the potential to create maintenance problems for these installations. A buildup of ice may inhibit proper vaporization or sever unprotected fuel gas supply piping. California Fire Code (CFC) Section 6104.3.3 has been amended to require that protective structures meeting the construction requirements of CBC Chapter 7A be installed to protect newly installed above-ground LPG containers located above the 6200 foot elevation. Due to the prevalence of LP-Gas installations, California Mechanical Code (CMC) Section 303.8.1 has been amended to clarify prohibited locations of LPG appliances and to require LPG alarms to be provided with newly installed LPG appliances.

2. EXPRESS FINDING: Geological.

(a) Seismic concerns. The western portion of Alpine County lies within the Sierra Block, an area of relatively low levels of active seismicity. Granitic stairways and lava flows are predominate in the areas of Hope Valley, Kirkwood, Bear Valley, and the Southern portion bordering the County of Tuolumne. The eastern portion of Alpine County includes an area of the Sierra Frontal Fault System. The Genoa Fault runs north-south in direction and extends through the county seat of Markleeville. The Genoa Fault was mapped in 1996 as Type: B, Slip rate: 1, Maximum magnitude: 6.9. The Antelope Valley Fault, several miles to the east, and within Mono County, parallels the Alpine/Mono County lines. The town site of Markleeville is located on a mixture of volcanic ash, tuff and decomposed granite. Alpine County has been mapped and designated to be a Seismic Design Category (SDC) "D".

(b) Liquefaction Hazards. Sites in Alpine County with liquefaction potential would be those in alluvial deposits having groundwater, sand and silt layers of uniform grain sizes within approximately thirty feet of the surface. Such conditions are generally not found in developed areas within the County.

(c) Slope Instability. The formation of landslides under natural conditions depends on several factors including steepness of slope, consolidation of aggregates, structural properties, vegetation, seismic activity, drainage courses and heavy precipitation. Snow avalanches are common to high elevation areas of certain pitch and exposure. New construction is not allowed in known avalanche zones.

(d) Expansive Soils. Soils with high clay content are considered to be expansive soils. Minerals in certain clays swell with increased moisture content and then contract during dry periods. The volume changes associated with seasonal variations in moisture content can damage shallow building foundations and pavement. Foundations for structures in Alpine County are required to be placed a minimum of 18 inches below finished grade. Clayey soils are generally uncommon in Alpine County. The CBC Section 1803.1.1.1 requirement for preliminary soils reports is formally adopted within this ordinance as noted below.

(e) Flood Hazards. Flooding has occurred and has the potential for reoccurrence in Alpine County. Over-bank flows of the Carson River, Mokelumne River and Markleeville Creek are typically attributed to heavy rainfall, saturated soils and/or unusually rapid snow melt. Alpine County had been previously designated as a Flood Zone "D" (unmapped). If new mapping identifies flood hazard zones, appropriate measures will be enforced in accordance with the various code sections within the CBC.

(f) Geotechnical investigations incorporating soils reports are required for new structures in Alpine County (SDC"D") unless it is determined by the building official that, due to the knowledge the building department has as to the soil qualities of the soil of the lot, no preliminary analysis is necessary, in accordance with CBC Section 1803.1.1.1.

3. EXPRESS FINDING: Topographic.

(a) Alpine County is designated as a Special Wind Region as referenced in CBC Figures 1609A, B & C. Case studies of historical data indicate that certain areas such as the western escarpment of the Carson Valley have higher recorded wind speeds and an elevated exposure category based on terrain. CBC Section 1609.3 and CRC R301.2.1 – Basic Wind Speed, has been amended to clarify the wind speed in the Mesa Vista and River Ranch development areas. Sierra Nevada ridges and mountain tops in Alpine County often experience westerly wind forces exceeding 150 mph. Though there is virtually no development of these locations, there are rare occasions where communication tower structures are in development and require site specific case studies for load combinations.

SPECIAL CONDITIONS:

(a) Due to the rural makeup of Alpine County small population (1200), diminutive percentage of privately owned lands (4%) and businesses and inherent limited resources, fire protection is mostly provided by local volunteers. The Markleeville, Woodfords, Bear Valley and Kirkwood communities each have a firehouse. Of these, only Bear Valley has a paid staff Kirkwood has paid chief. The Bear Valley Fire Department is staffed by Alpine County Sheriff's Department deputies who also serve as firefighters. Kirkwood is designated as a special district. Alpine County currently has no full time employees solely dedicated to fire protection. The Native American community of Hung-A-Lel-Ti is a Washoe Tribal community that also possesses a firehouse. Due to the nature of volunteer operations, response time in the event of an incident is increased. Wildland fire protection on private and public lands outside of local fire district jurisdiction is provided by state and federal agencies per mutual agreement. Further information is available under separate cover in the Alpine County General Plan.

(b) Due to the staffing and resource limitations, the building department has been designated to oversee the review of plan submissions for fire protection of new and altered structures. CFC Sections 105.1.1, 113.2, and 202 are administrative amendments for clarification purposes.

(c) Due to response time, access and staffing limitations, CFC Sections 903.3 and 903.3.9 clarify and amend fire alarm transmission and control room access requirements.

CONCLUSION:

While it is clearly understood that the adoption of such amendments may not prevent the incidence of fire and/or failure of structural elements, the implementation of these various amendments to the code attempt to reduce the severity and potential loss of life, property and environment.