

RESOLUTION NO. _____

A RESOLUTION OF THE COUNCIL OF THE CITY OF CUPERTINO MAKING FINDINGS RELATING TO LOCAL CLIMATIC, GEOGRAPHICAL, OR TOPOGRAPHICAL CONDITIONS SUPPORTING AMENDMENTS AND CHANGES TO THE 2016 CALIFORNIA BUILDING STANDARDS CODE.

WHEREAS, the City Council of the City of Cupertino, intends to pass an ordinance adopting the California Building Standards Code which consists of the 2016 editions of the California Building Code, Plumbing Code, Mechanical code, Electrical Code, Fire Code; the 1997 Uniform Housing Code, and making modifications and changes thereto; and

WHEREAS, the California Health and Safety Code Sections 17958, 17958.5 and 17958.7 require the governing body of a city, before making any modification or changes to the California Building Standards Code, to make an express finding that such modifications or changes are reasonably necessary because of local climatic, geological or topographical conditions; and

WHEREAS, as more specifically set forth in the memorandum of Albert Salvador, the City's Building Official, a departure from the Building Standards Code is reasonably necessary due to local climatic, geological, or topographical conditions;

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF CUPERTINO THAT:

1. The City Council hereby finds the following facts to be true:
 - A. The Bay Area region is a densely populated area with buildings constructed over and near a vast array of fault systems capable of producing major earthquakes, including, but not limited to the recent 1989 Loma Prieta Earthquake;

- B. Cupertino is situated adjacent to active earthquake faults capable of producing substantial seismic events. The San Andreas and Sargent-Berocal faults run through the lower foothills and the Monta Vista Fault is closer to the valley floor area. The Hayward fault is North East of the City which would also presents a risk to Cupertino in the event of an earthquake;
 - C. Vehicular traffic through Cupertino is significant, and continues to increase as Cupertino is an employment center as well as the location of residential projects;
 - D. Cupertino is divided by major freeways and expressways, the occurrence of a major earthquake could impact the ability of fire crews to respond to emergencies should one or more of the freeways or expressways collapse, be substantially damaged, or become gridlocked;
 - E. Fire suppression capabilities would be severely limited should the water system be damaged during an earthquake;
 - F. Cupertino experiences low humidity, high winds and warm temperatures during the summer months creating conditions which are particularly conducive to the ignition and spread of grass, brush and structural fires;
 - G. Cupertino's topography contains remote, steep hillsides which further limits the ability of emergency responders to extinguish or control wildland or structural fires;
 - H. The local geographic, topographic and climatic conditions require amendments to the California Codes to establish more restrictive conditions to improve structural integrity of the buildings in the event of a seismic incident and provide other protections to protect against the increased risk of fire.
2. The City Council hereby finds the following facts from prior exceptions to the Code to continue to be true:
- A. The waste water treatment facilities serving Silicon Valley cities are operating at or near maximum capacity. The discharge of treated waste water into San Francisco Bay is detrimental to its sensitive ecosystem; and
 - B. Cooling coil and comfort cooling equipment condensate waste discharge does not contain pollutants which require treatment before being discharged into sanitary sewers or the ground.

3. Based on the above facts, the City Council makes the following finding: that Cupertino's local geographic, topographic and climatic conditions require amendments to the California Codes to establish more restrictive conditions to improve structural integrity of the buildings in the event of a seismic incident, provide other protections to protect against the increased risk of fire, and protect the San Francisco Bay as more specifically set forth in the memorandum from Albert Salvador, the City's Building Official and as summarized in the chart attached hereto as Exhibit A.

4. Based on the above finding, the City Council determines that it is necessary to make local amendments to the California Codes based upon the local conditions.

ADOPTED this ____ day of _____, 2016, by the following vote:

AYES:

NOES:

ABSENT:

DISQUALIFIED:

BARRY CHANG

Mayor

ATTEST:

GRACE SCHMIDT

City Clerk

EXHIBIT A

MATRIX TABLE FOR JUSTIFICATION AND FINDINGS FOR LOCAL AMENDMENTS					
MUNICIPAL CODE SECTION	TITLE	ADDED TO CALIF. CODE	DELETED FROM CALIF. CODE	AMENDED FROM CALIF. CODE	JUSTIFICATION
16.02.010 through 16.02.030	These sections previously existed in the Municipal Code.	X			A
16.02.040	This section previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Building Code.			X	
16.02.050	This section previously existed in the Municipal Code. A reference change is made to reference the 2016 California Building Code. The California Building Code added language for Substantial Improvements in Flood Hazard zones.			X	
16.02.060 through 16.02.150	These sections previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Building Code.			X	
16.02.200	This section for submittal documents was added from the Administrative sections of the California Building Code.			X	
16.02.240 16.02.250	These sections previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Building Code.			X	
16.02.260	This section previously existed in the Municipal Code for inspection requirements but revised to include the entirety of Section [A] 110 of the 2016 California Building Code.			X	

16.02.270 through 16.02.300	These sections previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Building Code.			X	
16.04.010	This section previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Building Code.			X	
16.04.015	This section previously existed in the Municipal Code. This section modifies the CBC by adopting specific appendix chapters in the code. Only a reference change is made to reference the 2016 California Building Codes.			X	
16.04.050	Regulations for proper address identification already exist in the Municipal Code. The CBC, however, also has regulations regarding address identification. The adoption and revisions to Section 501.2 referenced in the Municipal Code brings Cupertino more in line with the model code.			X	
16.04.070 16.04.080	These sections previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Building Code.			X	
16.04.200	This section previously existed in the Municipal Code. A reference change is made to reference the 2016 California Building Code. Also, the municipal code section changed from 16.04.360 to 16.04.200.			X	D
16.04.210	This section previously existed in the Municipal Code. A reference change is made to reference the 2016 California Building Code. Also, the municipal code section changed from 16.04.370 to 16.04.210.			X	E
16.04.220	This section previously existed in the Municipal Code. A reference change is made to reference the 2016 California Building Code. Also, the municipal code section changed				

	from 16.04.340 to 16.04.220. Item 1 is not allowed is Cupertino's Seismic Design category, D2.				A
16.04.400	The swimming pool regulations in CBC Section 3109 is adopted to be consistent with the State Code and to be more uniform with surrounding jurisdictions. This section previously existed in the Municipal Code. A reference change is made to reference the 2016 California Building Code.	X			
16.06.010	This section previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Residential Code.			X	
16.06.015	This section previously existed in the Municipal Code. This section modifies the CBC by adopting specific appendix chapters in the code. Only a reference change is made to reference the 2016 California Residential Code.			X	
16.06.050	Fire sprinkler systems have been required by policy for the rebuild of existing homes. Clarification of this requirement is added in this section. Also, based on new requirements per Government Code Section 65852.2 for Accessory Dwelling Units, language has been added to waive Fire Sprinkler requirements for ADU's when the primary residence is not equipped with one.			X	
16.06.060	This amendment existed in the previous Municipal Code. Only a reference change is made to be consistent with the new section in the 2016 California Residential Code.			X	
16.06.070	No change other than minor reference changes were made to be consistent with the 2016 California Code.			X	
16.06.080	There is no change to this section, however, the findings for this amendment, introduced in the last code cycle, is included here for reference.			X	B

	This proposed amendment to the CRC is made to be consistent with TUCC amendment that modifies the plain concrete provisions in CBC Section 1905.1.7 and ACI 318 Section 14.1.4.				
16.06.090 & 16.06.100	No change other than minor reference changes were made to be consistent with the 2016 California Code.			X	A
16.06.110	<p>This amendment existed in the previous Municipal Code. Only a reference change is made to be consistent with the new section and table in the 2016 CRC Code. The amendment modifies the CBC and CRC to limit the use of gypsum wallboard and Portland cement or stucco as shearwalls.</p> <p>The proposed amendment addresses the problem of poor performance of gypsum wallboard and Portland cement plaster as wall bracing materials in high seismic areas. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance of these bracing materials that were observed in 1994 Northridge earthquake.</p>			X	B

16.16.010 & 16.16.020	These sections previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Electrical Code.			X	A
16.16.030	Language from the previous code is revised to reflect when a general building contractors are allowed to do electrical work. The municipal code is now consistent with the requirements of the Business and Professions Code Section 7057(b).			X	

16.16.040 through 16.16.060	These sections previously existed in the Municipal Code with no change			X	
16.20.010 & 16.20.015	This section previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Plumbing Code.			X	
16.20.020	No change.			X	
16.20.080	This section currently exists in the Municipal Code. This section is being omitted based on Section 814 of the 2016 California Plumbing Code containing all listed requirements.	X			C
16.24.010 & 16.24.015	This section previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Mechanical Code.			X	A
16.24.020	No change.			X	
16.24.030	This section currently exists in the Municipal Code. This section is being omitted based on Section 310 of the 2016 California Mechanical Code containing all listed requirements.	X			C

Chap 16.40	The entire Chapter (Chapter 16.40) is being repealed and replaced in its entirety.				A
16.40.010	This section previously existed in the Municipal Code. Only a reference change is made to reference the 2016 California Fire Code based on the 2015 International Fire Code.			X	
16.40.015	This section previously existed in the Municipal Code. This section modifies the California Fire Code by adopting specific appendix chapters in the code. A reference change is made to reference the 2016 California Fire Code.			X	
16.40.060	This section previously existed in the Municipal Code. This section was renumbered from 16.40.065. A reference change is made to reference			X	

	the 2016 California Fire Code. Also, inspection fees were updated to be more aligned with the current cost of service				
16.40.070	This section previously existed in the Municipal Code. A reference change is made to reference the 2016 California Fire Code.			X	
16.40.080 16.40.120 16.40.130	This section previously existed in the Municipal Code. This section modifies the California Fire Code by adopting specific appendix chapters in the code. A reference change is made to reference the 2016 California Fire Code.			X	
16.40.140 16.40.150	These sections were not adopted by the Fire Prevention Officers and removed from ordinance.			X	
16.40.180 through 16.40.230	These sections previously existed in the Municipal Code. A reference change is made to reference the 2016 California Fire Code.			X	
16.40.300 through 16.40.355	There is nothing new in the Wildland Urban Interface Fire Area section other than a reference change is made to reference the 2016 California Fire Code.			X	
16.40.360 through 16.40.450	These sections previously existed in the Municipal Code. A reference change is made to reference the 2016 California Fire Code.			X	
16.40.460	Reference Standards, Chapter 80, was adopted per recommendation from Fire Preventions Officers.			X	

Chap 16.42	This Chapter regarding Toxic Gases is repealed. These regulations now reside in Chapter 16.40.			X	A
16.54.010	This section previously existed in the Municipal Code. A reference change is made to reference the 2016 California Energy Code.			X	
16.58.010 16.58.015 16.58.040	These sections previously existed in the Municipal Code. A reference change is made to reference the 2016 California Green Building Standards Code.			X	

16.58.100					
16.80.040	Red, Yellow, and Green Placards have been updated to include reference to applicable California Penal Code Sections.			X	

KEY TO JUSTIFICATIONS FOR AMENDMENTS TO TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS

A	This amendment is necessary for administrative clarification and does not modify a Building Standard pursuant to California Health and Safety Code Sections 17958. This amendment establishes administrative standards for the effective enforcement of building standards throughout the City of Cupertino.
B	<p>This proposed amendment has been voted for approval by the <u>local Tri-chapter Uniform Code Committee (TUCC)</u> and addresses the problem of poor performance of plain or under-reinforced concrete footings during a seismic event. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance of plain and under-reinforced concrete footings observed in 1994 Northridge earthquake and based on the following:</p> <ol style="list-style-type: none"><li data-bbox="191 634 2009 711">1. The San Francisco Bay area is densely populated and located in an area of high seismic activity. Cupertino is bounded by the Hayward and San Andreas faults capable of producing major earthquakes.<li data-bbox="191 764 2009 878">2. Concern for fire-life safety associated with a structural failure due to a seismic event considering the increasing number of buildings in the region, the use of new structural systems, the poor performance of certain materials, and the quality of construction.<li data-bbox="191 932 2009 1045">3. Severe seismic events could disrupt communications, damage gas mains, cause extensive electrical hazards, and place extreme demands on the limited and widely dispersed resources of the Fire Department to meet the fire life-safety needs of the community.<li data-bbox="191 1099 2009 1213">4. The local geographic, topographic and climatic conditions pose an increase hazard in acceleration, spread, magnitude and severity of potential fires in the City of Cupertino, and may cause a delayed response from emergency responders, allowing further growth of the fire.
C	<p>The waste water treatment facilities serving many silicon valley cities are operating at or near maximum capacity. The discharge of treated waste water into San Francisco Bay is detrimental to its sensitive ecosystem.</p> <p>Cooling coil and comfort cooling equipment condensate waste discharge does not contain pollutants which require treatment before being discharged into sanitary sewers or the ground.</p>

D	Results from studies after the 1994 Northridge earthquake indicated that a lot of the damages were attributed to lack of quality control during construction. The proposed amendment improves quality control during construction and therefore needs to be incorporated into the Code. Revise CBC Section 1705.3 exception No. 1 to allow special inspection not to be required for isolated spread footing where the structural design of the footing is based on a specified compressive strength, $f'c$, no greater than 2,500 psi. This proposed amendment is a continuation of an amendment adopted during the previous code adoption cycle.
E	ISSUE: Revise section 1905.1.7. ACI 318 Section 14.1.4 that allows the use of plain concrete in residential structures assigned to Seismic Design Category C, D, E or F. RATIONALE: The proposed amendment addresses the problem of poor performance of plain or under-reinforced concrete footings during a seismic event. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance of plain and under-reinforced concrete footings observed in 1994 Northridge earthquake.