Earthquakes and Seismic Retrofitting Information

AV Fact-Finding Committee November 24, 2014

US Geological Survey pamphlet in English:
http://pubs.usgs.gov/gip/2005/15/gip-15.pdf

Above pamphlet in English, Chinese, Vietnamese, and Korean:
http://pubs.usgs.gov/gip/2007/42/gip42.pdf

The Association of Bay Area Governments:
http://resilience.abag.ca.gov/projects/earthquake-mapping-update/
View the interactive New Shaking Intensity Maps, filter to Hayward Fault 7.0, liquefaction susceptibility, fault location, and so on.

A USGS pamphlet specifically about the Hayward Fault:
http://pubs.usgs.gov/fs/2008/3019/fs2008-3019.pdf

Clarification regarding the two types of earthquake measurement systems (Richter Scale and the Modified Mercalli Scale):
http://www.dnr.mo.gov/geology/geosrv/geores/richt_mercali_relation.htm

Atchison Village is **not** on fill, which is good:
http://www.museumca.org/creeks/WholeMaps/13_Richmond%20Creek%20Map.pdf

Seismic Retrofit Information:

Atchison Village has 162 light, wood-frame, residential buildings.

- 46 two-story two-bedroom fourplexes 24'6" x 62'
- 19 two-story two-bedroom duplexes 24'6" x 31'4"
- 55 one-story three-bedroom duplexes 25; x 69'
- 25 one-story two-bedroom duplexes 24' x 56'
- 17 one-story one-bedroom fourplexes 24' x 90'

They are well built and we are fortunate in many ways. Our buildings are not one of the four most vulnerable types -- they do not have cripple walls, do not have garages built underneath, are not unreinforced concrete, nor are they on a steep slope. AV's architect specified our structures be bolted to their foundations according to the Universal Building Code, newly adopted in 1938. However our inspections show our builders did not strictly adhere to these new bolting specifications. As well, now we know an even stronger connection is necessary and how to do it.

Howard Cook has been a great resource for us as we've been researching this issue. He is a former AV member, who founded and co-owns **Bay Area Retrofit**. He spoke to us on October 19 and **will be here December 6 at 3 pm in the Hall to explain how we**

can retrofit our homes. See his website, http://bayarearetrofit.com/ for a large amount of information. Watch Video 11 for an explanation of what our buildings need.

Several other sources of retrofit guidance for our type of structures:

ABAG:

http://resilience.abag.ca.gov/housing/homeowners/

http://resilience.abag.ca.gov/wp-content/documents/HomeownerRetrofitWorkshop-040911-slides.pdf

CA.GOV:

http://www.seismic.ca.gov/pub/CSSC_2005-01_HOG.pdf
http://www.seismic.ca.gov/pub/CSSC_%202005-01_%20HOG%20Spanish.pdf

City of Los Angeles:

http://www.cert-la.com/BAS-How-You-Can-Strengthen-Your-Home.pdf

City of San Francisco:

http://www.sfgsa.org/modules/showdocument.aspx?documentid=9757

City of Seattle:

http://www.seattle.gov/emergency-management/what-can-i-do/prepare-your-home

City of San Leandro:

https://www.sanleandro.org/depts/cd/bldg/retrofit/handbook.asp

https://www.sanleandro.org/civicax/filebank/blobdload.aspx?blobid=3342

Very detailed retrofitting information:

http://www.bayarearetrofit.com/PDFs/design_book.pdf

http://www.quakecheck.org/quakecheck.pdf

Posted by the AV 2014 Fact-Finding Committee