

## **Finding L.A.'s fault lines before they fail**

*The city should require developers to check maps and do seismic testing before projects are built along earthquake fault lines.*

**Los Angeles Times, 9-28-13**

It was troubling to learn recently that three large-scale construction projects in Hollywood may sit closer to the active Hollywood earthquake fault than developers estimated when they submitted environmental reports to city officials. In all three cases, the city approved the projects on the basis of those reports; one is already under construction.

Now it turns out that yet another big project, a 39-story luxury residential tower in Century City, was approved by city officials in 2009, even though the center of the project site lies only 300 feet from the active Santa Monica fault. When a project is that close to a fault line, many experts and the state geologist recommend significant seismic testing before building. The Metropolitan Transportation Authority did extensive testing in this area for a possible subway stop on Santa Monica Boulevard and concluded that it was far too close to the fault. The MTA's research shows one of the strands of the fault running underneath the tower property. (The developer now says a detailed seismic study is underway.)

This is not a case of a developer who was unaware of the proximity to the fault line — it's right there in the geotechnical report from a consultant. It's a case of the developer not being legally obligated by the state to do testing.

The Alquist-Priolo Earthquake Fault Zoning Act requires the state to map active faults and set zones around them — generally 500 feet on either side of the fault line. Developers who want to build housing inside that zone are required under state law to do extensive testing to determine if their project straddles a "surface fault," one that could rupture on the surface. An earthquake on a surface fault moves the ground in opposite directions — and can break the foundation of a building, potentially causing massive destruction and injury.

The Hollywood and Santa Monica faults are active surface faults. But they have not yet been mapped because the state hasn't had the time or money to do it, so they are not covered under the Alquist-Priolo regulations. State officials are currently mapping the Hollywood fault, and when they finish, they will take up the Santa Monica fault.

The city does not have to wait for the state. It should set regulations of its own, mirroring the Alquist-Priolo regulations and ordering any developer building within 500 feet of an active surface fault to do trench digging or other extensive subsurface soil investigation. If the state has not yet mapped the fault lines, developers should be required to check the latest maps and research by reputable geologists as well as earlier state maps and any available seismic testing results from other developers who have built in the area. There is plenty of literature in this field. If the most reliable maps suggest that a project is within 500 feet of a fault, underground testing should be required to determine exactly how close it is.

There are numerous structures in Los Angeles built long ago on fault lines. We have to live with them. But let's try not to build any more.